CARE PERU

ENLACE PROJECT 1996-2000

OTUZCO-JULCAN PROVINCES LA LIBERTAD, PERU

FINAL PROJECT EVALUATION REPORT

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EXECUTIVE SUMMARY

The *Enlace* Project was designed and implemented by CARE from 1996 to 2000 in the poor mountainous provinces of Otuzco and Julcán in the La Libertad Region of northern Peru. The project was funded by the United States Agency for International Development under the PVO Child Survival Grants Program, CS-XII 1996-2000. Project objectives were focused on three interventions areas. The first area was prevention and control of diarrheal diseases in children through increased breastfeeding and use of liquids, better recognition of dehydration, decreased use of antibiotics and anti-diarrheal medicines for diarrhea, and increased hygiene behaviors. The second set of objectives was on control of acute respiratory infections and pneumonia through improving mothers' recognition of danger signs and increasing utilization of health services for treatment. The third intervention area was improving maternal health through recognition of danger signs and symptoms in pregnancy, childbirth, and postpartum, increased use of services for preventive care for all pregnant women and for all women with complications in pregnancy, childbirth, and postpartum.

Main accomplishments of the *Enlace* Project were the design and development of several innovative organizational strategies that are a major contribution to international work in community health development. One was the design of organizational structures -APROMSAs and COPROMSAs – for health promoters that allowed them to work within a legalized institutional framework that represents promoters in their relationships with the health system and other community leadership organizations such as municipalities. These structures provided a firm basis for sustainability of health promoter work that is rarely found in community health programs. Another innovation was the development of a complete community surveillance system – SIVICS – that provided an effective methodology for health promoters to identify and monitor community members at high risk of needing health services (i.e. children under age one, pregnant women, and women of reproductive age). SIVICS has gained the attention of the Peruvian Ministry of Health, which is interested in expanding the methodology to the rest of the country. Creative communication techniques, designed based on community preference studies, were an important contribution to changing health behaviors and attitudes toward use of health services. The *Enlace* project also developed a gender approach to community health through training of "Women Leaders" in communities instead of the more common male health promoters, increasing the cultural acceptability and therefore effectiveness of health education to women on women's health issues. A unique model was developed for obstetrical emergency evacuation from remote communities, based on organized readiness plans with participation of local authorities, promoters, and community members.

Highlights from the comparison of baseline and final evaluation KPC surveys include some of the following improvements in the target population between 1996 and 2000

- 46% to 64% of infants under six months were exclusively breastfed.
- 30% to 15% of diarrhea cases were treated with antibiotics or other medicines.
- 19% to 56% of mothers recognized two signs of pneumonia in children.

- 33% to 60% of children with cough, rapid or difficult breathing received medical care.
- 3% to 51% of mothers identified two signs or symptoms of obstetrical risk.
- 45% to 93% of women with complications in pregnancy, delivery, or postpartum received medical care.

Priority conclusions of the project were the following:

The project provided important confirmation that the organizational and managerial aspects of a community health program are at least as, if not more, important as the technical approach taken.

One of the key features of the *Enlace* Project was the high degree of co-implementation with the Ministry of Health (MOH). The participatory working style of *Enlace* strengthened both institutional capability and acceptability of the project products on the part of the MOH.

The technical approach in the three intervention areas was effective because it was oriented to best-recommended practices, with strategies based on pre-project analysis of mothers' beliefs and practices. The focus was on preventive measures, identification of danger signs and symptoms, and referral or emergency evacuation to a health facility.

The project identified the importance of using a gender approach to maternal health interventions in communities, using of "Women Leaders" trained to promote maternal health in the community, overcoming resistance to male providers and male health promoters.

The project highlighted the advantages of a flexible project design and open management style to be able to respond to community-generated solutions to their needs for structuring health services and designing information delivery systems.

Finally, suggestions based on project findings are provided at the end of the report as to how the Ministry of Health should improve its policies to support the development of community-based health systems in order to more effectively reach health sector goals of reducing needless morbidity and mortality in the most vulnerable populations.

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	scription of APROMSA Development	
	th Planning Form	
H. KP	C Final Survey Report	

ABBREVIATIONS

ADD Acute diarrheal disease

APROMSA Asociación de Promotores de Salud

(Health Promoter Association)

ARI Acute respiratory infection
CARE Care And Relief Everywhere
COPROMSA Comité de Promotores de Salud

(Health Promoter Committee)

CLAS Comité Local de Administración de Salud

(Local Health Administration Committee)

DIP Detailed implementation plan
DISA Dirección de Salud Regional

(Regional Health Department Office)

EOC Emergency obstetrical care HIS Health information system

IEC Information, education and communication

MOH Ministry of Health of Peru

NGO Non-governmental health organization

PRONAA Programa Nacional de Asistencia Alimentaria

(National Food Assistance Program)

PVO Private voluntary organization

SIVICS Sistema de Vigilancia Comunal de Salud

(Community Health Monitoring System)

TBA Traditional birth attendant

TOT Training of trainers

UPAO Universidad Privada Antenor Orrega

UTES Unidad Territorial de Salud

(Territorial Health Unit)

I. INTRODUCTION AND BACKGROUND

This is the final evaluation report of the *Enlace* Project, carried out by CARE-Trujillo, Peru, under a grant from the PVO Child Survival Grants Program, funded by USAID/BHR/PVC, in the funding cycle CS-XII 1996-2000.

Enlace Project beneficiaries were 47,000 women of reproductive age and children 0-5 years of age among an estimated 128,000 inhabitants living in 597 scattered communities in two poor rural provinces of Otuzco and Julcán in the highlands of the Department of La Libertad on the northern Pacific coast of Peru in South America. This inland zone of steep hills and valleys has difficult access from the coastal departmental capital, Trujillo. The area has no asphalt roads, and only the main roads between the five main towns are "firmed" dirt roads. Poverty in the area was exacerbated during most of the project implementation period due to severe flooding (related to the El Niño phenomenon of 1998) and alternating drought. This was alleviated in the final project year with normal rains and a bountiful harvest that, combined with reforestation projects in the area, created a stunningly beautiful landscape.

The provinces of Otuzco and Julcán comprise the territory covered by the Territorial Health Unit (UTES) No. 8 of the Regional Health Office of La Libertad. Access to health services increased dramatically during the past five years through a number of mechanisms put into place by the Ministry of Health. The five health centers and 10 health posts mentioned in the 1997 Detailed Implementation Plan (DIP) increased by an additional 11 health posts for a present total of 26 peripheral health facilities in UTES-8, in addition to the small hospital in The "Strengthening Health Services Project" through an IDB loan provided equipment and some management training. Staffing was facilitated by the "Basic Health for All Program" (PSBPT), funded by the public treasury, which provides financial incentives for health professionals to work in isolated facilities under 3- to 6-month contracts. PSBPT provided for lengthening working hours of health facilities from 6 hours to 12 hours, and in some facilities to 24-hour coverage. The majority of facilities are now open seven days a week. Contract renewal under PSBPT depends on performance evaluations and monitoring of service production. These rules resulted in improvements in work habits and increased adherence to MOH norms for patient care. Still, high turnover of personnel was a problem. At the beginning of the *Enlace* project, 80 of 88 MOH health staff in Otuzco-Julcán were contracted by PSBPT.

Another project working in the Otuzco-Julcán area was "Project 2000", a maternal-child health project financed by USAID Peru during 1995-2000 with goals to increase quality and effectiveness of health services. The project was to provide a series of inputs such as establishing a permanent capability in model hospitals and model health centers for training of health personnel, systems for continual quality improvement, IEC, training of community health workers, and others. Recently extended for a two-year period, Project 2000 has had only partial implementation in Otuzco-Julcán, with initial activities just beginning in clinical training of health personnel and some aspects of quality improvement. Community activities under Project 2000 were not implemented in the Otuzco-Julcán area. CARE Peru is the major sub-contractor to Pathfinder under this project.

An important intervention in the Otuzco-Julcán area occurred in 1999, when the Regional Health Office of La Libertad converted all health facilities in UTES - 8 to administration under the "Shared Administration Program", with five Local Health Administration Committees (CLAS) conforming five micro-networks of the 26 health facilities. According to the Regional Health Office of La Libertad, the conversion to CLAS in Otuzco-Julcán was done in recognition of the "high level of community participation in health achieved through *Enlace*." One of several advantages of the CLAS model is that personnel are contracted by CLAS under private sector law with additional benefits, so that personnel turnover is reduced and quality is improved due to the social control over the health facility by the community.

Any evaluation of *Enlace* must take into consideration the above-mentioned health inputs that may have influenced project impact. In other words, it may be difficult to attribute improvements in project impact indicators only to *Enlace*. However, the in-depth key informant interviews in communities, health facilities, the UTES, and DISA leave little doubt of the major and probably lasting effect of *Enlace* on changing attitudes, paradigms, and organizational structures in the communities of Otuzco-Julcán, and the potential of its strategies for expansion to other areas. The expansion of *Enlace* strategies is already being seen in their incorporation into other projects and programs through the MOH in other parts of Peru.

II. ASSESSMENT OF RESULTS AND IMPACT OF THE PROGRAM

A. Results: Summary Chart

<u>Baseline</u> and <u>achieved</u> values for all *Enlace* Project indicators are listed in Table 1in the three main intervention areas: (1) control of diarrheal diseases; (2) control of pneumonia cases; and (3) maternal health. The table also lists the <u>expected</u> values of the indicators, as listed in the 1997 Detailed Implementation Plan (DIP). The confidence interval on the percentage listed as <u>achieved</u> is provided in order to assess how well the achieved value corresponds to the expected value. If the <u>expected</u> value is within the confidence interval of the <u>achieved</u> value, then the objective was successfully reached. Several indicators significantly surpassed the expected value.

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¹ The Shared Administration Program is a new form of health services administration under the Peruvian health reform in which an elected committee of community members forms a legally constituted private non-profit organization (Comité Local de Administración de Salud - CLAS). The committee receives and manages public funds under a contract with the DISA for implementation of a Local Health Plan. With the health facility medical director as CLAS manager, the CLAS is responsible for monitoring implementation of the Local Health Plan, with decision-making power for hiring and firing health personnel, for allocating of funds gained through charging fees-for-service, among other responsibilities. As a private entity, CLAS can generate additional funding for health-related activities from other public and private sector sources.

Table 1 ENLACE PROJECT 1996-2000 OTUZCO Y JULCAN – PERU BASELINE AND FINAL EVALUATION INDICATORS

INDICATOR		(%)		
HUDICATOR	BASELINE	EXPECTED	ACHIEVED	
	1996		2000	
CONTROL OF DIARRHEAL DISEASE	<u> </u>			
June 2007 from AC 407 to 7007 the management of skilling less than	46.4	70	64*	
Increase from 46.4% to $\underline{70\%}$ the proportion of children less than six $(0-5)$ months of age with exclusive breastfeeding.	46.4	70	04**	
six (0-3) months of age with exclusive oreastreeding.			60 <p<70< td=""></p<70<>	
Increase from 70% to <u>85%</u> the proportion of children 0–23	70	85	84.6	
months of age who received an equal or greater amount of breast				
milk during a diarrhea episode in the last 2 weeks.			80.6 <p<88.6< td=""></p<88.6<>	
Increase from 63% to 75% the proportion of children 0-23	63	75	72.6*	
months of age who received an equal or greater amount of liquids				
and/or breast milk during a diarrhea episode in the last 2 weeks.			67.6 <p<77.6< td=""></p<77.6<>	
Increase from 49% to 65% the proportion of non-breastfeeding	49	65	63.0*	
children 0-23 months of age who receive equal or greater amount				
of food during a diarrhea episode in the last 2 weeks.			58 <p<68< td=""></p<68<>	
Decrease from 30% to $\underline{\mathbf{15\%}}$ the proportion of mothers with	30	15	16.5*	
children 0 a 23 months of age who gave medicines or antibiotics			12.5 20.5	
when their child had diarrhea in the last 2 weeks.			12.5 <p<20.5< td=""></p<20.5<>	
CONTROL OF ACUTE RESPIRATORY INFEC	TION / PN.	EUMONIA	CASES	
Y	22		COdut	
Increase from 33% to 60% the proportion of mothers with children 0-23 months of age who seek appropriate medical	32	60	60**	
care for their child with cough and rapid or difficult breathing.				
care for their clinic with cough and rapid or difficult oreathing.			51 <p<61< td=""></p<61<>	
Increase from 37% to $\underline{70\%}$ the proportion of children 0–23	37	70	70.7**	
months of age with cough and rapid or difficult breathing treated				
by MOH health providers or community health promoters.			63 <p<73< td=""></p<73<>	
Increase from 18.7% to 70% the proportion of mothers who	18.7	70	56**	
recognize two signs of pneumonia in children.				
			50.5 <p<60.5< td=""></p<60.5<>	

(continued on next page)

MATERNAL HEALTH			
	- 10		-01
Increase from 60% to <u>80%</u> the proportion of mothers who, verified by immunization cards or prenatal care cards, received two or more doses of tetanus toxoide vaccine before the birth of their child 0-23 months of age.	60	80	79*
			75 <p<83< td=""></p<83<>
Increase from 38% to <u>60%</u> the proportion of mothers with at least one prenatal visit before the birth of their child 0-23 months	38	60	72.7**
of age.			67.7 <p<77.7< td=""></p<77.7<>
Increase from 3.5% to <u>60%</u> the proportion of mothers with children 0–23 months of age who can correctly identify at least	3.5	60	50.7**
two signs or symptoms of obstetrical risk.			47.6 <p<57.6< td=""></p<57.6<>
Increase from 24% to <u>80%</u> the proportion of mothers who can correctly identify the health facilities that offer emergency	24	80	50.7*
obstetrical care (EOC).			45.7 <p<55.7< td=""></p<55.7<>
Increase from 45% to <u>65%</u> the proportion of mothers with a prenatal, intranatal, or postnatal complication who are treated in	45	65	92.9**
a health facility.			90.2 <p<95.5< td=""></p<95.5<>
TOTAL NUMBER OF CASES	N=321		N=355

^(*) Significant difference from baseline: p<.05

Source: Chavez, Carlos and Freddy Marreros, <u>Proyecto Enlace</u> Evaluación Final: 31 de julio – 20 de agosto 2000.

B. Results: Technical Approach

1. Overview of the project

The original project document (DIP) for *Enlace* provided a general program strategy that, while solid in itself, was significantly surpassed in scope and depth by on-going strategy development. Many of the innovations were born from continual suggestions from project workers, health personnel, promoters, and the community itself. A flexible project management style permitted various ideas to be tested and expanded to the entire project area. The innovations, while maintaining original project objectives, involved implementing new organizational structures and strategic alliances that provided a firmer foundation for project interventions and post-project sustainability.

According to the DIP, the original project had three basic approaches to meet its goals. These were:

 Community-level participation – including community organization to resolve maternal-child health problems, design in the community of an emergency transportation system, training health promoters in three priority CS interventions, utilization of improved IEC methods, and systems for community monitoring that would be compatible with the standard MOH information system.

^(**) Highly significant difference from baseline: p<.01

- **Institutional strengthening** specifically focusing on strengthening the APROMSAS² and the MOH to improve their capacity to deliver sustainable services in communities, especially child survival services. The original strategy included building on a previous CARE Water and Sanitation (W&S) project in the Otuzco area that had developed a large cadre of W&S promoters. That project had helped to organize two APROMSAS in the areas of two out of five health centers (micro-networks of health centers with their 4-5 health posts). The APROMSAS were seen to play a role as links between MOH facilities and promoters, providing a channel through which health care could better reach communities, and through which communities could better express their needs to the MOH. The idea was to strengthen the APROMSAS through training in leadership and organizational development, eventually helping them to develop a capacity to certify health promoters as able to carry out their functions in home treatments and promotion. The MOH would be institutionally strengthened by *Enlace* providing technical assistance to: (1) adapt the three priority CS protocols (diarrhea, ARI, and maternal health) to the community level; and (2) improve MOH training and logistics systems by training of trainers and support systems to the community.
- Synergy with other CARE projects including especially the CARE Water and Sanitation Project, the CARE Multi-sectoral Population Project (PMP), and Project 2000. The general plan of *Enlace* was to work on strengthening the community and the link between MOH and community, while other projects were to strengthen health facilities to deliver services.

As the *Enlace* project progressed, needs were identified, and specific strategies, many of them innovative, were developed to meet those needs. By the end of the first year, several issues became clear to project staff regarding the project plan:

- The original plans for strengthening APROMSAs in each micro-network would benefit from an expansion to an organized promoter committee in each health facility, not just one in an entire micro-network of health facilities.
- The community health surveillance system could be organized into an integral community health system,
- The IEC approach needed a strong community-based orientation, and
- The expected synergy with other projects to strengthen health facilities was not clearly on the horizon; therefore, action would have to be taken by *Enlace* to fill some of the needs at that level to support their community health work.

In more detail, these innovations were:

APROMSAs/COPROMSAs -- Health promoters themselves identified the need for decentralization of promoter organization down to the level of each health facility, resulting in the development of COPROMSAs (*Comités de Promotores de Salud*), which would

² An APROMSA (Association of Health Promoters) is a legally constituted private non-profit entity with statutes and regulations that guide its structure and functions.

oversee the work of individual promoters. The APROMSAs, which were organized at the level of a micro-network of health facilities, then developed a more managerial role in coordinating with the MOH and other local organizations, planning, supervising, fundraising, and other means of supporting all COPROMSAs within its micro-network.

Community information system -- Design of a community surveillance system developed into a very organized and integral system for community health diagnosis, risk assessment, monitoring, identification, referral and follow-up of cases. The name SIVICS was given to the system – Community Health Surveillance System (*Sistema de Vigilancia Comunal de Salud*).

IEC approach -- The approach became one of basing the selection of messages and medium on the preferences expressed by the community itself. A study was commissioned by *Enlace* to the Department of Social Communications at the Universidad Privada Antenor Orrego (UPAO) to identify the ways people prefer to obtain information in communities. The study results were put into immediate use by *Enlace* to enrich the project IEC component.

Health facility personnel training -- *Enlace* provided many more training resources than expected to health personnel to improve their capacities in the areas of information gathering and utilization, educational methodology, leadership and management, and other specific topics. These are listed in more detail below.

2. Progress report by intervention area

The three basic intervention areas were (1) diarrheal disease control, (2) ARI/pneumonia case control, and (3) maternal health. Each of these is discussed here briefly, with the caveat that the vertical program design in three specific intervention areas of child survival as expressed in the DIP was not carried through in the same vertical spirit (to the benefit of the project). Rather, the crosscutting approaches were the most important developments of the project that strengthened sustainability, and that will allow easy expansion of effort to other important health issues, such as child nutrition and growth, family planning promotion, and others that were of expressed interest by the promoters and mothers in communities. Approximately half of the *Enlace* promoters had been trained previously under other projects, and this was reflected in the broad range of interests expressed by them in their requests for additional training in the Annual Operating Plans developed by the APROMSAS.

It was useful for the project to work on only three intervention areas to focus attention, facilitate learning, and simplify project implementation. In addition, fewer intervention areas in this project allowed time for developing high quality methods for training and IEC components. This facilitated the acquisition of skills by MOH personnel and promoters to be able to transfer skills to other topic areas.

a. Diarrheal disease control

Excellent results were achieved by *Enlace* on diarrheal disease control indicators. All five key indicators were achieved within 6 percentage points of the expected proportion, and four of them were within 2.5 percentage points.

The baseline KPC in 1996 showed that more than half of mothers did not know what danger signs to look for in the case of diarrhea. During the project, the major messages transmitted to mothers by *Enlace* promoters on diarrheal diseases were consistent with the MOH National Diarrheal Disease Control Program standards to increase breast milk and liquids during diarrhea episodes, continue feeding during diarrhea, reduce utilization of antibiotics or other medicines, and to exclusively breastfeed children under six months of age for prevention of diarrhea. Promoters also provided education on prevention of diarrhea through better household and personal hygiene.

Information on the prevention and treatment of diarrhea was clearly portrayed in flipcharts and guides that each promoter had in her/his possession, that were utilized for group talks or individual counseling in home visits to high risk families in the community. This work was facilitated and focused by the SIVICS community surveillance system which allowed promoters to concentrate monthly home visits on households with children under the age of five, with special focus on under ones. With the SIVICS monitoring and reporting system, promoters were motivated to provide information to mothers on recognition of diarrhea and how to start early home treatment with increased breastfeeding, liquids, and feeding.

Project staff reported that, at the beginning of the project, many mothers demanded oral rehydration solution (ORS) salt packets to treat diarrhea at home. *Enlace* had to reinforce the idea that promoters should teach mothers to increase their use of liquids (in general, not with ORS) for diarrhea in the home, and how to recognize the signs of dehydration. The main messages were: 1) the mother should start increasing liquids at home as soon as diarrhea begins; 2) mothers should not use ORS salt packets for diarrhea cases without dehydration; 3) if dehydration occurs, take the child immediately to a health unit; and 4) do not use self-prescribed medicines for diarrhea.

Mothers also received hygiene messages from *Enlace* promoters who had previously been trained as water and sanitation promoters under the CARE Water and Sanitation Project. In the final evaluation qualitative interviews, a good number of the convenience sample of 37 promoters remarked that one of the ways in which mothers had changed was that they were using more hygienic practices than before. Promoters also said they were seeing fewer diarrhea cases now. These observations were supported by results of the final impact evaluation showing a decrease in 15-day prevalence of diarrhea from 33.6% at baseline to 25.6% at the end of project.

In-depth interviews with a convenience sample of 26 mothers for the final evaluation showed that nearly all had learned new things about diarrhea and hygiene from personal contact with health promoters. Expected levels of behavioral change were achieved in four indicators

related to home management of diarrhea, as shown in Table 1. Compared with baseline, mothers learned to give an equal or greater amount of breast milk (considering only children who were currently breast fed) during diarrhea (70% at baseline increasing to 85% at the end of project); to give equal or greater amounts of liquids and/or breast milk during diarrhea (63% increasing to 73%); and to give an equal or greater amount of solid or semi-solid food during diarrhea (49% increasing to 63%). Breastfeeding was a topic that many had learned about directly from promoters, with fewer mothers receiving information on that subject in areas where the project had been active only in the final project year (micro-network Callancas). This was consistent with reports from promoters interviewed in that zone who had not yet received the training on breastfeeding, providing a possible explanation for why the exclusive breastfeeding indicator fell a bit short of the expected figure. Despite the shortfall, much was achieved. At baseline, 46.4% of children less than six months of age were exclusively breastfed, and this increased significantly to 64% at the end of project. The expected proportion had been set at 70%.

In addition to the project indicators on diarrhea disease control, data from the MOH information system shows that the number of cases of dehydration treated in the UTES – 8 Otuzco-Julcán Network decreased from 38.7% 1996 to 21.8% in 1999.

Lessons learned in the diarrheal disease control component revolve around the importance of the following characteristics of the *Enlace* strategy:

- Focus on danger signs and symptoms in training of promoters and education of mothers.
- SIVICS system for continual home visits for education, monitoring, and referral.
- Referral and counter-referral system.
- Availability of educational material (flipcharts) to educate mothers on key messages.
- Existence of a receptive health care system that worked harmoniously with community agents.

b. Acute Respiratory Illness/Pneumonia Cases

The DIP provided the framework followed by *Enlace* for ARI with the focus on teaching mothers how to recognize the signs and symptoms of pneumonia. The strategy also included working with mothers to ensure effective care and support at home for children with colds and upper respiratory infections, discourage self-prescription of antibiotics, and immediate evacuation to a health facility of children with signs or symptoms of lower respiratory infection or pneumonia.

Enlace also would have liked to prepare all promoters to administer a first dose at home of cotrimoxazole before transferring a case of pneumonia to a health facility. However, the MOH had serious reservations on approving this. **Enlace** negotiated with the MOH to allow promoters to handle cotrimoxazole if they live in communities that are distant from a health facility, on the condition the promoter receive substantial training and supervision.

The same as for diarrheal diseases, information on the early identification and treatment of acute respiratory infections (ARI) and pneumonia was clearly portrayed in flipcharts that were utilized by promoters in group talks and home visit counseling. The SIVICS monitoring and reporting system motivated promoters to provide information to mothers on recognition of signs and symptoms of ARI/pneumonia, and how it was essential to notify the promoter immediately to assist them with seeking medical care if needed. As ARI researchers note³, it is difficult for even a physician at times to describe the difference between a common cold and pneumonia, so the best course of action is to make sure the child is seen by a health provider.

Enlace impact evaluation results showed successful implementation in changing mothers knowledge and practice in ARI. The prevalence of ARI in the project area increased from 41.2% at baseline to 52% at the end of project, suggesting either a seasonal difference in prevalence, or a better ability of mothers to identify and report respiratory symptoms in their child. The final evaluation survey of 352 mothers found that 62.5% mentioned difficult breathing as one of the danger signs of ARI, compared to 17% of mothers who identified this symptom in the baseline survey. Another danger sign, sub-costal retractions (hundimiento de piel debajo de las costillas) was mentioned by 32.1% of interviewed mothers, an increase from the baseline value proportion of 0.6% of mothers who mentioned that as a danger sign. In total, the proportion of mothers who knew no danger signs of ARI was reduced by more than half from 47% at baseline to 20% by the end of project.

Looking at actual behavior in the impact evaluation, there was an increase from 37% at baseline in 1996 to as much as 71% of children ages 0-23 months with cough and rapid or difficult breathing during the previous two weeks who received care from either promoters or MOH providers. Considering the proportion of children in this age group with ARI who were treated by MOH providers, a baseline value of 37% was increased to 60% at the end of project. Impact evaluation results also showed an increase in the proportion of mothers who recognize two signs of pneumonia in children from 18.7% at baseline to 56% at the end of project. Although the achieved level did not reach the expected 70% on this indicator, the increase of nearly 30 percentage points is a tremendous change of public health significance.

Lessons learned in the ARI/pneumonia component revolve around the importance of the following characteristics of the *Enlace* strategy:

- Focus on danger signs and symptoms of ARI.
- Early evacuation for treatment at a health facility.
- SIVICS system for continual home visits for education, monitoring, and referral.
- Referral and counter-referral system.
- Availability of educational material (flipcharts) to educate mothers.
- Existence of a receptive health care system that worked harmoniously with community agents.

³ Mull, D et al. (1994) "Mothers' perceptions of severe pneumonia in their own children: a controlled study in Pakistan", <u>Soc. Sci. Med.</u> Vol. 38, No. 7, pp. 973-987.

c. Maternal Health

The area of Otuzco-Julcán has had one of the highest rates of maternal mortality in Peru due difficult access routes and paucity of health facilities, in addition to cultural and economic barriers to access. The *Enlace* strategy in maternal health was to provide mothers with the principal messages on signs and symptoms of danger during pregnancy, birth, and postpartum and the need for early evacuation to a health facility at any sign of complications. *Enlace* promoted consistent professional prenatal and postnatal care and professional birth attendance in facilities or in the home.

A key aspect of the maternal health strategy was the development in each community of a system for emergency evacuation. *Enlace* worked with community leaders and health promoters to organize a community committee for emergency evacuation, which often became part of the role of a community multi-sectoral committee or local health committee. Every family in each community knew what its role was in case a pregnant woman, or anyone else in a medical emergency, needed to be evacuated to a health facility. To evacuate patients, each community had a litter made of a long canvas cloth with tubular slots sewn in on each side (provided by *Enlace*) into which two long poles or branches (provided by the community) were slid to form a stretcher. The rule was that the neighbors living on either side of the person in danger were responsible for carrying the stretcher. The litter was stored at the house of the health promoter or the home of a community leader; whichever was more centrally located in the community. The litter was carried on foot, sometimes at great distance, to the closest point where a vehicle could be found to transport the patient to an appropriate health facility. The radio system installed by *Enlace* in all 26 health centers and posts was used in these cases by health posts to call into network centers to send an ambulance to pick up the patient. Though the emergency evacuation system was originally meant for obstetrical emergencies, *Enlace* found that cooperation with the system was increased in communities when the orientation was to any emergency. Complete information is not available on how many lives have been saved with the emergency evacuation system, but one anecdotal report was that at least 10 evacuations had taken place in one of the five micro-networks of Otuzco-Julcán. Another micro-network designed a emotive mechanism to encourage emergency evacuations, creating a poster with a 'Garden of Life' commemorating of all the children, women, and men whose lives had been saved, with their photos glued on in place of the flowers.

To complement the emergency evacuation system, CARE promoted family savings for health expenses (the MOH charges for most services). First on a pilot basis in one micronetwork, CARE distributed plastic piggy banks to pregnant women and families with children under five. This was so successful, the activity was then promoted by the APROMSAs in the other areas. The piggy banks were sold by the APROMSAs at a small profit. The family savings scheme was described more fully in the mid-term evaluation.

Through a series of focus groups with women in communities on the subject of breastfeeding, *Enlace* found that an emphasis on maternal health required a female to provide information, counseling, and referral for female health issues. The focus groups

indicated that traditional birth attendants (TBA) or other women leaders in the community could play this role, receiving the same training as health promoters, with an emphasis on maternal health. *Enlace* chose well to assign the name, "women leaders" to this new community agent. The volunteer community agents trained in maternal health therefore included male and female health promoters and "women leaders". Unlike other MOH projects, such as Project 2000, that train TBA in how to attend "clean births" and provide them with a delivery kit, *Enlace* made a policy decision to not promote home deliveries by non-professionals.

The training was on identification of signs and symptoms of complications and evacuation, and promotion of professional care for all prenatal visits and birth attendance. Information on maternal health was clearly portrayed in flipcharts in the possession of volunteers for talks to groups of mothers or individual counseling to pregnant women. Again, this work was facilitated and focused by the SIVICS community surveillance system which allowed volunteers to concentrate monthly home visits on households with pregnant women and women of reproductive age. With the SIVICS monitoring and reporting system, volunteers were motivated to provide key information to mothers on maternal health.

Highly significant changes were recorded on mothers' knowledge and behavior on key indicators of maternal health. *Enlace* impact evaluation results showed an increase from 3.5% at baseline to 50.7% the proportion of mothers with children 0–23 months of age who could correctly identify at least two signs or symptoms of obstetrical risk. This fell somewhat short of the expected 60%. A much higher proportion of mothers identified at least one symptom of obstetrical risk.

The indicator on correct identification of health facilities that offer emergency obstetrical care (EOC) showed a baseline value of 24% of mothers of children 0-23 months of age, increasing to 50.7% by the end of the project. This proportion could have been closer to the expected 80%, but it is possible that health volunteers handled this information themselves, and just made sure that women knew which facility to go to for prenatal care and birth attendance, since only the hospital in Otuzco offers comprehensive EOC. At the time the project began, it had been expected that Project 2000 would provide inputs for increasing resolutive capacity for obstetrical emergencies in several of the micro-network health centers. This has not occurred yet. Other indicators of maternal health service use reached the expected value, or went significantly beyond the expected values. Receipt of two or more doses of tetanus toxoide vaccine before the birth of their child 0-23 months of age increased from 60% to 79% (expected was 80%). At least one prenatal visit was obtained by 72.7% of women with a birth in the past two years, up from 38% at baseline in 1996, and significantly surpassing the expected 60%.

One of the most impressive results on the impact of *Enlace* was that 92.9% of women with a complication in pregnancy, birth, or postpartum in the previous two years received treatment at a health facility. This figure more than doubled the value of that indicator, 45%, found at baseline in 1996. The other important finding was the increase in professional birth

attendance from 14.5% at baseline to 34.8% at the end of project (disaggregated into 24.8% in health centers or posts, and 10% at home by a professional).

Lessons learned in the maternal health component revolve around the importance of the following characteristics of the *Enlace* strategy:

- Focus on danger signs and symptoms of pregnancy, birth, and postpartum and immediate evacuation of complications.
- Training of female community agents ("women leaders") for educating mothers on women's health issues.
- SIVICS system for continual home visits for identification of pregnant women, education, monitoring, and referral.
- Volunteers assisting families to make a birth plan. (Attachment G)
- Referral and counter-referral system.
- Availability of educational material (flipcharts) to educate mothers.
- Existence of a receptive health care system that worked harmoniously with community agents.

3. New approaches and special studies

Two major new approaches developed by *Enlace* were the organizational development of promoter associations - APROMSAs and COPROMSAs (described in more detail in section II.C.1. on Community Mobilization), and the SIVICS Community Health Surveillance System (described in more detail in section II.C.2 on Community Health Surveillance). A smaller innovation was the implementation of a stand-alone counter-referral form. While CARE has been successfully promoting referral counter-referral systems in many countries in recent years, *Enlace* and the health unit staff created a modification, giving a form to a patient who comes in without a referral to take back to their local health volunteer. This serves to introduce the patient to the promoter's role and alerts the promoter to follow-up with the patient for treatment compliance, return appointments, etc.

Special studies conducted under the project and the way the information was used were as follow:

Study on breastfeeding – Focus groups were held in 1998 to determine the best ways to develop mothers' breastfeeding support groups in communities. The results were used to design and develop a Community Support System in Breastfeeding, the methodology of which was taught to a group of 20 health care providers from health centers (1), health posts (11), and the Otuzco Hospital. An evaluation of the actual organization of community support groups has not been done. An important unexpected result of the breastfeeding focus groups was to discover the importance to women of having other women give them information on their health. Up until then, the great majority of health promoters were men, and their role to discuss with women about women's health issues was little accepted by either women or the male promoters themselves. These findings encouraged *Enlace* to develop the strategy of "Women Leaders", which found high acceptance among both men and women in communities.

Study on beliefs and attitudes of mothers in ARI and breastfeeding - This study was commissioned to students at the Universidad Privada Antenor Orrega (UPAO) in Trujillo, with the results utilized for developing educational materials for mothers.

Study on preferences for communications methods - This study was also commissioned to students at the Universidad Privada Antenor Orrega (UPAO) in Trujillo with the goal of developing an appropriate and effective IEC strategy. The information gathered was put to excellent use by *Enlace* to develop a varied and creative set of community education methods that are described in more detail in section C.2. of this report.

C. Results: Cross-cutting approaches

1. Community Mobilization

Community mobilization was the centerpiece of the *Enlace* Project. Three different target groups were health promoters (including promoter organizations, APROMSAs and COPROMSAs), community leaders and organizations in larger towns (to form multi-sectoral committees), and leaders and members of individual communities (to form local health committees).

APROMSAS and COPROMSAS

The aspect that makes *Enlace* stand out as a unique community health project in Peru, in Latin America, and perhaps in the world, is its system giving a unique and firm organizational structure to health promoters. A formal health promoter committee (COPROMSA) in each health facility groups together all the promoters in the relevant surrounding communities. They pay a small quota to join the committee. The COPROMSA elects a board of directors, with president, vice president, secretary, treasurer, and *fiscal*. Monthly meetings are held with all promoters and health facility staff, in which promoters turn in monthly community surveillance reports, solve problems, and plan activities. To support the COPROMSAs, an association of promoters (APROMSA) is formed, comprised of the presidents of each COPROMSA in an MOH network of health facilities. There are approximately 4-6 COPROMSAs represented in each APROMSA, which also elects from among its members a board of directors, with president, vice president, secretary, and treasurer. The APROMSA is a very strong and sustainable organization, since it is legally inscribed in the public registry as a private non-profit organization. (See Attachment F for more on history and organization of APROMSAs.)

The promoter organizations as developed through *Enlace* have gained the skills necessary for self-management and for collaborating with the MOH as well as with a variety of other community organizations. These relationships have even been formalized in signed agreements (*convenios*) between APROMSAS, MOH health facility or CLAS, and municipal governments that stipulate the obligations of each party in providing for community health services. A copy of the signed agreement between the MOH CLAS Agallpampa, the

APROMSA of Agallpampa and the Municipal Government of Agallpampa is attached in Attachment D, as is that of micro-network of Usquil.

APROMSAs and COPROMSAs were trained to prepare annual operation plans, which they review on a monthly basis to guide and evaluate progress on their activities. MOH recognizes that the APROMSA and their annual operating plans allow promoters to function more effectively in some of the following ways:

- a) Holding monthly coordination meetings with the health facility staff,
- b) Coordinating with MOH staff to carry out preventive and promotional activities in communities,
- c) Organizing network and micro-network-wide contests and other IEC activities to promote participation of the population in health-related issues,
- d) Getting individual promoters more involved and committed to their work in the community,
- e) Soliciting MOH and other multi-sectoral support for health promoters such provision of training, supervision, and other types of coordination, and
- f) Supervising and evaluating promoters.

APROMSAs have a complete system of self-supervision that provided an additional means of technical and organizational sustainability after the end of *Enlace*. From the point of view of the APROMSAs, there are at least five levels of supervision:

- a) Promoters supervise mothers and children in communities,
- b) COPROMSAs supervise and evaluate the work of individual promoters,
- c) APROMSAs supervise COPROMSAs,
- d) Coordinating Committee of APROMSA Presidents supervise APROMSAs, and
- e) The MOH supervises the APROMSAs every three months.

APROMSAs and COPROMSAs view their organizations as benefiting promoters in the following ways:

- a) The organizations supervise the work of promoters, and identify training needs,
- b) The organizations provide incentives for promoters to be motivated in their work,
- c) The organizations have mechanisms to coordinate and make plans with MOH health personnel,
- d) The organizations have mechanisms to coordinate with local authorities to replace promoters who have deserted or who do not work well, and
- e) For many, the training and knowledge received as a promoter is the best benefit they could receive.

A concrete sign of the consolidation and determination of these organizations, and the community support being provided, was the effort of several APROMSAs and COPROMSAs to obtain an assignation of land from the community governing body for he building of their own permanent office and meeting hall. Some APROMSAs and COPROMSAs had already been provided a temporary meeting place in a central location by local authorities. Interviews with local authorities revealed that the APROMSAs and

COPROMSAs have already gained recognition as another community organization that deserves to be dealt with by the community government.

Community leaders and organizations in larger towns - multi-sectoral committees

Enlace actively sought to promote multi-sectoral committees in all towns with a health facility and COPROMSA. There is no precise information on how far along these committees had come in their development. Larger towns had a better level of development than smaller towns. In any case, final evaluation interviews with 15 community leaders from all parts of Otuzco-Julcán revealed that all, with exception of a very few who were new in their posts, had a very high level of knowledge and approval of health promoter activities, the COPROMSAs and the APROMSAs. More than half of those interviewed mentioned ways in which the community leadership organization provides material support to the promoters, including such items as gasoline and food for training sessions.

Leaders and members of individual communities - health committees

Leaders at this level were organized in all communities with assistance of *Enlace* to form committees for emergency evacuation, with a plan of action for immediate mobilization to evacuate mothers with obstetrical complications or any other type of medical emergency.

Near the end of project, *Enlace* was beginning to make progress in organizing health committees in each small commune that would have a broader role than just emergency evacuation, drawing on the leadership of all commune-based governmental and non-governmental organizations, and in linkage with the health promoter committee (COPROMSA). Communal leaders interviewed for this evaluation all attested to working with promoters and supporting them to meet their needs.

2. Community Health Surveillance

The data collecting system formed part of a systematic and integral system designed by *Enlace* called SIVICS (Sistema de Vigilancia Comunal de Salud) or Community Monitoring System. The system has the following components:

- **Sectorization** Geographical mapping of the jurisdiction of a health facility into sectors, each of which is assigned to a health provider who is then responsible for all extramural work in that sector. Health promoters within sectors, each of whom is responsible for approximately 30 families, work with the health professional assigned to that sector.
- Community census a house to house survey is conducted by promoters and is updated on a continual basis on "family cards", with information that is reported on a monthly basis to the MOH facility on population size by age groups, including monthly birth and death data.
- **Community maps** each promoter creates a map of all houses for which s/he is responsible, numbering the houses, and identifying with labels which have "high

risk" members, i.e. under one year of age, pregnant woman, or woman of reproductive age.

- **Home visits** monthly visits are made to all "high risk" households to monitor health and provide health education, and make referrals if necessary for preventive or curative care at the health facility.
- **Monthly reports** each promoter turns in a monthly report on number of high risk persons in the community, number of cases of illness identified by type, number of cases referred, number of educational activities completed, etc.
- Extramural visits by health providers based on monthly promoter reports, health personnel can make specific monitoring and follow-up visits to high risk patients in the community, accompanied by the health promoter in each sector, thus making extramural work more efficient and effective.

It is clear that SIVICS is a data collection system that provides immediate inputs to a community health management system. The role of COPROMSAS in monitoring the monthly reporting system helps to ensure that promoters adhere to the system, and provides sustainability to SIVICS.

SIVICS was a major development of *Enlace* that has drawn the interest of MOH officials in the DISA of La Libertad, in other DISAs, and in the central level MOH General Office of Epidemiology (OGE). The DISA Director in La Libertad, Dr. Henry Rebasa, expressed his plans to expand SIVICS to all communities in his jurisdiction. The OGE Director, Dr. Percy Minaya, provided financial and technical support to *Enlace* to develop a series of videos on the SIVICS system to facilitate dissemination of the methodology to other areas, regionally, nationally, and internationally.

3. Communication for Behavior Change

Methods used by *Enlace* for communication and behavioral change were of two main types: (i) face-to-face health education provided by promoters to community members, and (ii) community-wide IEC activities. In both, *Enlace* sought to promote a three-stage methodology of adult education beginning with (a) motivations based on one's own previous knowledge and experience, (b) problem analysis based on general theory or facts, and (c) reflection and commitment to change to an improved practice.

In order to develop their IEC component, *Enlace* commissioned a study on the subject of community communication preferences, done by students in a social marketing class in the Department of Social Communications of the Universidad Privada Antenor Orrego (UPAO). This important study allowed *Enlace* to really understand the mechanisms needed to communicate new ideas to people and the best ways to develop the messages to communicate new ideas. With this approach, *Enlace* was able to come up with some unique and effective means to communicate and promote behavioral changes. All IEC activities were conducted directly by community health volunteers or MOH staff with *Enlace* providing training, support and materials.

The types of communication methods promoted by *Enlace* were, specifically:

Face-to-face health education:

- Counseling during home visits.
- Talks with groups of mothers through an agreement with PRONAA (National Program for Food Assistance) which is managed through municipalities, promoters were allowed time to give talks to women in their monthly meeting to receive PRONAA foods.

Community-wide IEC activities:

- Art in health Several types of activities were in this category. Contests were held among women's community groups to see who could design the best wall mural on a specific topic (for example, on the topic of promoting institutional deliveries). The winning designs were actually painted on large natural flat rock walls in towns or next to roads that would be clearly visible to all passing by. The incentive was to have one's art displayed. Other contests were held to write songs, poems, and skits on health topics.
- *Tómbolas* are group games organized during community festivals that congregate large numbers of people from all surrounding areas. This involves a roulette-type wheel that someone spins, landing on a number that corresponds to a question on health. If the player or anyone else in the audience answers correctly, they win a small prize (i.e. an inexpensive but useful plastic household item). Health personnel assist the promoters ahead of time to prepare the questions and answers. This is one of the most popular IEC strategies that health personnel considered sustainable, since the prizes were very inexpensive and could be purchased with health facility resources.
- Radio shows and spots Many small towns had local private radio stations that could be used for a fee for weekly or daily radio shows on health-related topics.
 Enlace subsidized the cost at first. Later, arrangements were made for another local NGO to subsidize the cost for promoters. Radio show scripts on health topics were developed jointly between promoters and health facility personnel.

The training approach of *Enlace* in working with promoters on IEC was to make sure the promoter understood the reason WHY each danger sign and signal was important, and WHY it was important to give specific information to mothers in health education sessions. This orientation was important for them to focus on educating the community on danger signs and symptoms in the three intervention areas (diarrhea, ARI/pneumonia, and maternal health), and to promote use of health services.

Enlace learned some of the following lessons from their experience with IEC:

- Always start with a diagnosis of practices, customs, beliefs, and myths of the people.
- Respect people's customs.
- Know people's customs, and seek which ones can be used for means of communication (i.e. painting large wall murals designed by the people themselves).
- Messages and means of communication should be born from the people themselves.

- Messages transmitted by the MOH, NGOs, and health promoters should be consistent.
- Various levels of communication should be used for the same message to achieve impact.
- Work on only one theme at a time in an IEC activity.
- Material should always be adapted to a particular zone.
- Health personnel and promoters must be able to handle educational methodology for adults.
- IEC methods should be entertaining and artistic.
- Use contests whenever possible (to promote healthy competition, increase self-esteem, and provide a social activity).
- Take advantage of opportunities such as community meetings for the promoter to speak.
- Take advantage of technical resources in local universities and other NGOs.
- Include all local institutions and organizations in communities to implement an activity in order to make it more sustainable.

4. Capacity Building Approach

a) Strengthening the PVO Organization

CARE USA is a well-established and internationally recognized development agency with 50 years of experience working in 100 countries around the world. The experience gained through the PVO Child Survival Grants Program funding of *Enlace* provides CARE with innovations and strategies that CARE will be able to apply to future community health projects.

How has this grant improved the capacity of the PVO to design, implement and evaluate effective child survival programs?

[Judiann McNulty]: "This grant has allowed us to implement possibly our most effective, sustainable CS project ever. By having a flexible DIP and focusing on strategy rather than specific technical interventions, we were able to innovate and perfect as the project was implemented. We have been able to work in an environment that allowed us to refine our approaches to working *through* the MOH, learning how to take advantage of what motivates them, in order to garner their support for community health (extra-murál) at all levels – local, district, regional, and national. Through this grant, we have also learned how to make a complex design work with minimal staffing. In sum, this project has "pushed us to the maximum" in a good way - taking us to a much higher level in Child Survival programming."

Have effects of this grant influenced other programs operated by the PVO?

[Judiann McNulty]: "In subsequent projects, we are using the same strategy of working *through* the Ministry (as opposed to simply in partnership), we are focusing more on sustainability using the concepts learned, and we are replicating the strategy of organizing community volunteers in Nepal, Tanzania, and Nicaragua. Most importantly, we have developed an overall children's health strategic plan, which focuses on taking strategies developed in district-level projects such as this to national scale. We have accomplished this through *Enlace* in Peru and we now know we can do it elsewhere."

b) Strengthening Local Partner Organizations

Enlace contributed to building organizational capacity of local partners in these areas:

- (i) Strengthening the organization of community health promoters The work of *Enlace* to help organize health promoters into the formally structured committees and associations of COPROMSAs and APROMSAs has been discussed elsewhere in the report. Due to the legal and therefore permanent constitution of these structures, one would have to say that this is the most solid instance of institutional strengthening achieved by *Enlace*.
- (ii) Strengthening MOH community health and participation policies For the UTES 8, the work of *Enlace* to develop a model of community health in Otuzco-Julcán was key to strengthening the health care system of the entire zone. An MOH official stated that community work was critical for the achievements in health care coverage in the mountains of Peru. He noted that the MOH, in general "hasn't learned how to collaborate with the community", the reasons being that there is no MOH policy on community work, and that university programs for education of health professionals produce health providers that resist working with communities. Many would agree with that observation. The MOH official was of the opinion that SIVICS and the APROMSA/COPROMSA organizations were excellent ideas, being of practical use and sustainable, but a worry was on the side of financial sustainability, since the MOH is frequently in financial crisis.

The MOH solution to sustainability was to create a formal Directoral Resolution that formalized within UTES -8 all the elements of the *Enlace* Project. Thereby, the entire *Enlace* strategy was made official, specifying responsibilities of health facilities in continuing to support the training, supervision, monitoring, and supply of health promoters, as well as the organizational structures and information systems set up by *Enlace*.

Enlace worked with MOH from project initiation, beginning with joint work on the baseline data collection and initial planning activities. On-going joint planning between the MOH and *Enlace* permitted a high level of coordination between the two institutions. The UTES recognized the large number of promoters trained previously by different projects, such as GTZ-PRAS, CARE Water and Sanitation, and CARE-PMP. The UTES credits *Enlace* for working with all of these promoters and organizing them into strong associations. Without

Enlace, those promoters would have been lost, but now the entire system is strengthened. An MOH official observed that NGO projects need to seek sustainability from project initiation, coordinating with the MOH and avoiding as much as possible the financing of activities that will not be able to be continued with financing from the MOH afterwards. For example, incentives provided for completing a prenatal visit, or covering all the costs of food and materials for a training program for health promoters. The MOH would then be forced to find other ways of covering these expenses in order to sustain the activities.

According to Dr. Henry Rebasa, Director General of DISA La Libertad, *Enlace* was instrumental in strengthening the institutional relationship between the MOH, community health promoters, and local political structures such as the municipalities. He also recognized the institutional strengthening aspect of helping the MOH, especially health professionals in health facilities, to understand that increased productivity in services can result from increased community health work.

- (iii) Strengthening MOH human resources *Enlace* could be credited with strengthening the capacity of human resources in the DISA, UTES, and health facilities through various program management activities. For example, *Enlace* included MOH staff from all three of these levels in meetings and activities for:
 - developing *Enlace* overall operational plans,
 - developing micro-network operational plans in each micro-network,
 - presentation and discussion of annual progress reports,
 - evaluation planning,
 - implementation of evaluations,
 - presentation of evaluation results.

Results of the project's participatory working style were to strengthen institutional capability, increase acceptability of the project itself, and thus strengthen possibilities for project sustainability. This represents somewhat of a watermark in MOH experience with NGOs in Peru. Frequently in other projects, a lack of trust on the public sector side is a detriment to successful transfer of knowledge and skills from the private to public sector.

- (iv) Strengthening health networks and micro-networks *Enlace* strengthened the formation of the Network of UTES 8 (*Red UTES 8*) and five micro-networks (Micronetworks Agallpampa, Callancas, Ramón Castillo, Julcán, and Usquil) through a number of mechanisms to strengthen the resolutive capacity of health facilities to respond to emergencies and to administer community programs, including:
 - Provision of 25 radios in 29 health facilities were a major contribution of *Enlace* to strengthening the health care system in Otuzco-Julcán, especially given the difficult access conditions and lack of telephone communications. (Information on the utility of the radios was included in the mid-term evaluation report.)
 - Coordination with the UTES on where to distribute *Enlace*-funded radios and other resources.

- The community-level information system strengthened the monitoring by micronetworks and on a network level with opportune information. *Enlace* provided training in EPI-INFO to facilitate compilation of data and analysis.
- (v) Strengthening sustainability of community health processes DISA La Libertad officials noted several products of the *Enlace* Project that provide sustainability to MOH community health development efforts:
 - System for health education of mothers,
 - Referral and counter-referral system,
 - System for training of promoters,
 - System for organizing promoters in APROMSAs and COPROMSAs,
 - Model agreements between MOH-APROMSA-Municipality, and
 - Model for community surveillance SIVICS.

The DISA La Libertad says they are currently planning to expand the SIVICS model to at least three other provinces in the Department, using it specifically to address the problem of maternal mortality. They plan to support the development of APROMSAs and COPROMSAs in those areas, which they see as essential to ensure the successful functioning of SIVICS.

c) Health Facilities Strengthening

Strengthening of health facilities was included in the original DIP as mainly oriented to their role in training, supervision, and logistics for supporting community promoters, APROMSAs, and COPROMSAs. Strengthening of the training system was accomplished through the *Enlace* system for the training provided to health personnel: training of personnel in micro-network centers was done by *Enlace* with participation of UTES personnel plus micro-network center personnel with experience; training of personnel in health facilities was done by *Enlace* with participation of micro-center personnel plus health facility personnel with experience. Strengthening of supervision capabilities was accomplished by developing supervision instruments and helping to organize monthly meetings between health personnel and promoters.

Continuing problems that made it difficult for health facilities to support extramural work include: changes in health personnel, lack of fuel when funds did not arrive from Lima, and lack of formats needed for SIVICS reporting system.

The original *Enlace* Project plan assumed that Project 2000 would take charge of most aspects of health facilities strengthening, allowing *Enlace* to focus on community and on making the link between health facility and community. Project 2000 installed management committees (*comités de gestión*) in each micro-network in Otuzco-Julcán. Since Project 2000 completed only initial activities in the Otuzco-Julcán area, many health facility needs were left unmet. Several needs were identified (<u>lessons learned</u>) for strengthening the health facility to enable it to support community work:

- Strengthen the management committees from the beginning of the project in order for them to serve as the MOH counterpart for promoters and promoter associations.
- Install a system for performance evaluation in the health facility that considers four sets of performance indicators: intramural management, intramural health services delivery, extramural management, extramural health services delivery.
- Recognize community health work as part of the production of services that is required for personnel evaluation.
- Find a way for health facilities to dedicate a budget line item for forms and transportation to communities.

d) Strengthening Health Worker Performance

Health facility personnel were included in all the training provided for promoters, APROMSAs, and COPROMSAs, resulting in the strengthening of skills and capability of health facilities on a variety of issues related to support of promoters. A table in Attachment E shows the courses given for MOH personnel by topic and profession. These included, for example:

- Educational methodology for adults,
- Use of EPI INFO for data management,
- Management of SIVICS,
- Improved data reporting and processing of the MOH information system (HIS) for diarrhea, ARI, and maternal health services,
- Use of community health information for management purposes,
- Leadership and management for APROMSAs, including how to develop annual operating plans for APROMSAs,
- Breastfeeding counseling skills and organization of community breastfeeding support groups,
- Personal and collective leadership strengthening of "Women Leaders", and
- Planning for the systematization of the *Enlace* Project.

Health personnel were able to see that the organization of community work by promoters in identification and referral of cases was helping them to meet their required goals of health services coverage⁴. They realized that by taking on health promoters as allies and sharing with them their specific needs for health services production, that the promoters were further motivated to collaborate with them, strengthening the links between health facilities and communities.

⁴ The MOH requires monthly production figures by each health area within each vertical health program, based on estimated population. This system is useful in "motivating" health personnel to do case-finding, but at the same time is perverse, since population estimates may seriously under or overestimate the true population, and the goals are mostly oriented to curative and not preventive health services.

In the final evaluation interviews, health personnel themselves identified changes that had taken place in their work because of *Enlace*. These included:

- Increased use of integrated health care approach.
- Increased use of family files for integrated admission procedures.
- Previous focus on immunizations and growth & development, now more focus on preventive activities such as education, follow-up of cases in the community, and identification of pregnant women in the community.
- Better relationship with communities communities and health providers know each other better now.
- Better-planned extramural work with promoters coordinating visits with communities.

e) Training

MOH health facility personnel felt that the training provided to promoters by *Enlace* was more effective than previous training provided by MOH to promoters, especially noting the effectiveness of the *Enlace* flip charts on each subject area (diarrhea, ARI, maternal health) that were used for training promoters who in turn used the same materials for educating mothers. Providers considered that training of promoters before *Enlace* was not well organized, lacked MOH funds, and lacked an organization on the part of the promoters such as the COPROMSAS. Many health personnel interviewed felt that promoters still needed continuing training on health subjects to improve their knowledge and skills in educating the community.

Enlace provided training of trainers (TOT) to health facility personnel in workshops on "Methodology for Adult Education" which provided a useful method for planning behavioral change, called AAMMEE. This stands for: Analysis (of the problem, the target population, beliefs, behavior change objectives, etc.); Attention (plan to draw attention to the subject); Motivation (making people recognize the problem); Message (provision of correct information on the problem); Exercise (group dynamics for participatory learning); and Evaluation (feedback on message comprehension). This component of TOT training was considered highly useful by all health personnel interviewed in the final evaluation.

A listing of all training provided by *Enlace* is found in Attachment E, showing the types of training provided, number, and type of training participants.

Evidence that the training strategy was effective - There are innumerable types of evidence that the training strategy was effective. Regarding training of health promoters, one can see evidence of the training in the following results, for example:

- Each promoter's community map.
- Monitoring panels identifying pregnant women, cases of diarrhea and ARI/pneumonia.
- Monthly SIVICS report of each promoter.
- Monthly home visiting plans.
- Reports on supervision of individual promoters by COPROMSAs.

- Annual operating plans of APROMSAs and COPROMSAs.
- Notebooks with minutes of each COPROMSA meeting.
- Notebooks with minutes of each APROMSA meeting.
- Correspondence of COPROMSAs and APROMSAs requesting coordination with other institutions, for fund-raising, etc.
- Use of evacuation litters in communities.
- Use of family bank for emergency expenses.

Regarding training of health providers, one can see evidence of the training in some of the following results:

- Improved consistency between HIS data and program data.
- Increased use of counter-referral slips.
- Community map with sectors indicated.
- Schedules for extramural visits to sectors.
- Health personnel knowledge of project objectives, and functions of promoters, APROMSAs and COPROMSAs.
- Schedules for monthly meetings with promoters.

5. Sustainability Strategy

Sustainability goals and objectives - Four major goals of the *Enlace* sustainability strategy as listed in the DIP were: a) the APROMSAs are effective advocates of change, b) the promoters mobilize communities to demand quality child survival services, c) community leaders administer local responses to needs, and 4) the MOH deals with themes of quality of care and equity. All of these major goals were met, including the specific objectives articulated in the DIP for each goal.

The "required activities" identified in the DIP varied somewhat from what the project actually did to meet the objectives. For example, the vision of how APROMSAs would support promoters to create change under the first goal was significantly broadened from the plans elaborated in the DIP.

The fourth goal for the MOH to deal with quality and equity was met to a lesser degree, because the technical assistance to have been provided by Project 2000 did not come through in time. "Required activities" for the fourth goal, regarding approval of norms and clinical protocols, and personnel performance evaluations, were implemented in other parts of the country by the Basic Health and Nutrition Project (PSNB) funded under a World Bank loan, but not in the Otuzco-Julcán Network. Coordination between CARE and Project 2000 could have been better. The *Enlace* project manager made a concerted effort to maintain communication with the local Project 2000 coordinator (also a CARE employee), but there was insufficient support from CARE Lima to assure synchronization of activities.

Phase-over plan - The project has been run since the beginning with implementation by and through the MOH. *Enlace* has provided technical assistance at all times and at all levels of

the health system so that the project would in effect be "owned" by the MOH at the end of project.

DISA level: The Project Coordinator, Dr. Luis Espejo, worked continually with his DISA counterpart, Lic. Luisa Ancajima, in charge of the Community Participation Office for the DISA, and other DISA officials. Plans are being made by the DISA to use Otuzco-Julcán as a training area for extension of the *Enlace* model to other provinces in La Libertad, and to other DISAs as well.

UTES level: The Chief Technical Assistant of *Enlace*, Alejandro Vargas, worked with his counterparts in the UTES–8 Otuzco-Julcán Network. The UTES Director signed a Directoral Resolution, thus making an official regulation to maintain all components of the *Enlace* strategy in MOH facilities of the UTES.

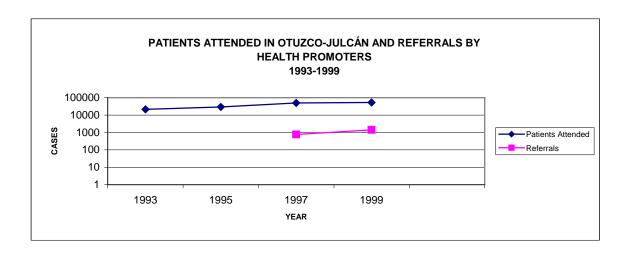
Health facility level: *Enlace* professional field staff personnel worked with MOH health facilities to provide the technical assistance necessary so that MOH personnel would train and supervise the promoters, APROMSAs, and COPROMSAs. The project is ending now in Otuzco-Julcán, and no further technical or management assistance will be provided by *Enlace*. However, health personnel state that they plan to continue training promoters and working with APROMSAs. Health personnel say they will continue to meet with community leaders to inform and involve them in health activities. Nearly all health personnel see the APROMSAs and COPROMSAs as very solid organizations that are sustainable. At the same time, some MOH personnel say they need help to train promoters, and that the APROMSAs still need additional strengthening through more training. Many were concerned that there will be no MOH resources for training, and that it will be difficult for the APROMSAs to generate all the necessary resources on their own. They were also concerned about their perception that the DISA does not prioritize community work.

Financial sustainability – The main issue of sustainability that is of concern to MOH officials and staff at all levels, from the DISA on down, is the financial sustainability. *Enlace* paid for all costs of promoter and MOH personnel training, materials, activities, meetings, etc. during the entire project until the final year when costs where beginning to be transferred to the promoter associations themselves, with plans made for the associations to acquire financial independence. APROMSAs and COPROMSAs were trained in how to organize fund-raising activities, such as raffles, chicken barbecues, and other community activities, precisely to ensure their self-sustainability. New promoters were charged a fee of five soles (about US \$1.50) to be enrolled as a member of COPROMSA. A rule was agreed that 15% of COPROMSA income was to be given to the APROMSA. These strategies were having some success.

Still, there are costs for certain items that will need subsidizing from somewhere, without which some project activities are in danger of collapsing. This particularly concerns the continual reprinting of forms for the SIVCS surveillance system and a series of other forms for monitoring and supervision. At the end of the project, the UTES-8 was beginning to realize that printing costs might not be too excessive, once they made some cost calculations. The solution discussed was to have each micro-network budget for its own forms and pay the UTES to print the forms in bulk for economy of scale. A final agreement had not been reached as of preparation of this report.

Another issue is the financing of monthly promoter meetings in the health center run by the COPROMSA and health facility personnel. These meetings are critical to keep promoters in the loop, motivated, to provide them with new information or training, and to maintain the monthly reporting for SIVICS. Due to distances, promoters usually have some transportation and food costs. Various types of arrangements were being explored to cover the food problem, such as agreements with government food programs (PRONAA), asking the promoters' communities to send food to be cooked at meetings, or having the promoter bring her/his own food. Transportation cost was still a question. Of course, none of these small costs would be a problem if the MOH had a policy to allow vertical child survival program budgets to cover some of these costs, or if CLAS would use some of its self-income for community health activities.

Demand for services - As to whether the project has built demand for services, we are convinced that the strategies implemented of well-focused health education provided by promoter, SIVICS, the referral system, and organizational efforts in communities for the emergency evacuation system have all contributed importantly to a sustainable demand for services. Data⁵ show that the number of patient-care contacts for children under five years of age in the Otuzco-Julcán Network of 26 health facilities increased from 23,945 in 1995 to 61,782 for the year 1999. As discussed in the introduction, it is difficult to determine how much of this can be solely attributed to *Enlace*, considering the other MOH inputs into strengthening health services availability and quality during the same period. This qualitative final evaluation suggests that the promoters served an extremely important role to identify high-risk cases, educate community members, and make successful referrals.



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⁵ Official data of the DISA La Libertad - Office of Statistics and Informatics, based on the HIS reporting system.

Was community engaged to influence provision of services - As health promoters increase their leadership in communities and begin to take more of a role as elected community members of CLAS, they will have an increasing possibility to influence how health services are delivered. At this time, each of the five CLAS in the Otuzco-Julcán Network have between one and five health promoters serving on the six-member committees. In the Agallpampa Micro-network, an *Enlace* health promoter who became president of the APROMSA is now the president of the showcase CLAS Agallpampa. This is an outstanding example of community health leadership development through a project, interacting with a health sector reform initiative to permit citizen participation in health.

III. PROGRAM MANAGEMENT

A. Planning

Planning process - Project planning for *Enlace* was done by CARE staff and consultants based on previous CARE project experience in the Otuzco-Julcán area. Experiences in other areas of the world were also drawn on. The actual process of implementation used the original plan as a basis, but progressively modified the plans based on inputs from communities, promoters, COPROMSAs, and APROMSAs.

Practicality of the DIP – The detailed implementation plan (DIP) was a good basic working document that, in retrospect, could have anticipated some issues, leaving these as lessons learned for future projects. These lessons included:

- Presumptions were made about inputs from other projects on which the *Enlace* project depended. The lesson is that all indispensable components should be included as part of the project, not depending on presumptions. For example, the DIP assumed that health personnel and facilities in micro-networks would have a reasonable resolutive capacity to treat obstetrical emergencies. *Enlace* found this not to be the case.
- The DIP assumed that Project 2000 would provide clinical protocols on child survival interventions for training and performance monitoring and evaluation of health personnel. This was not the case. An attempt should have been made to coordinate the use of clinical protocols in integral child health and maternal health developed by the PSNB project. Project 2000 had an agreement with PSNB to not duplicate the effort of developing new protocols.

Gaps in the DIP – Several issues were identified that were not included in the DIP, but should be included in future DIPS, based on *Enlace* experience. These are listed as follows, with a description of how *Enlace* addressed the issue during project implementation:

- No mention in the DIP of gender focus—*Enlace* created a line of work with "Women Leaders" to promote women's health in communities.
- No mention in the DIP of strengthening organizational aspects of the health services

 Enlace worked to support the organization of the Otuzco-Julcán network into micro-networks, and instituted the strategy of "sectorization" of communities to organize the extramural work of MOH health providers.

- No mention in the DIP of strengthening organizational aspects of health promoter
 associations and how these would articulate with health services *Enlace* made
 tremendous progress in creating legal and sustainable organization structures for
 health promoters, and the design of mechanisms for the articulation with health
 services and other community leadership organizations.
- No specific mention in the DIP of how communication strategies would be developed

 Enlace developed a mechanism of community level (bottom-up) design of IEC strategies.
- No specific mention in the DIP of how a community obstetrical emergency evacuation system would be implemented *Enlace* developed a system based on full community participation, with structured organizations of community leaders, health promoters, and community members to take charge of the system in each community. *Enlace* also developed the idea (based on community suggestions) of helping communities obtain stretchers made with simple appropriate technology for carrying patients in emergencies.
- No mention in the DIP of savings plans for emergencies *Enlace* developed and promoted a family savings system using piggy banks. This system, where implemented in the project area, had a very enthusiastic response among women who learned that it was to their benefit to store spare coins for health needs, since only some health services are free from the MOH.

In summary, *Enlace* did much to augment the DIP, which had more of a focus on technical health service issues. The project was taken as a "work of art in progress", with an on-going identification of gaps, and working with health facilities and communities to seek organizational solutions to organizational problems. <u>Future DIPs should recognize the need for organizational solutions and should try to budget for them, but not assume having full knowledge of what will be needed or what will be the best solutions.</u>

B. Staff Training

Enlace staff attended at least ten different courses during the project period, some in Peru and others internationally, most organized by CARE International and others offered by Peruvian technical organizations. **Enlace** staff who attended a course were expected to replicate the training for the remainder of staff who didn't attend. **Enlace** saw these courses as having been key to the development of various innovations within the project. The fresh ideas and exchanges of materials and methods from CARE projects in other countries served many purposes for **Enlace**: staff motivation, personal development of staff members, and maintenance of teamwork.

Courses taken by *Enlace* staff were on the following subjects: indicators and data collection instruments for community work, referral systems, supervision, community empowerment, sustainability based on organizational strengthening, institutional strengthening, strategic planning, leadership and project design, planning for training, IEC, maternal health, and participatory evaluation.

C. Supervision of Program Staff

Adequacy of supervisory system - Three levels of program supervision were implemented, most of which was considered highly effective in content and methods. These were:

- 1. CARE International (Atlanta, GA) to CARE-Trujillo: The Deputy Director of Child Health of CARE USA made supervisory visits twice a year during the entire project duration. The technical input was felt to be excellent. Project personnel considered this an important accompaniment for them to validate the decisions being made on the ground.
- 2. CARE Peru in Lima to CARE-Trujillo: Frequent supervisory visits were made to Trujillo from the main CARE Peru office during the first phase of the project, with an excellent level of technical input and support. Much less direct supervision from this level was carried out in the latter phases of the project was done, with communications mainly by telephone and electronic mail.
- 3. CARE-Trujillo to *Enlace* Project field staff: Supervision meetings were held at least once per month in the field during the first two years of the project when the major project components were being designed and installed in the field. In the last two years of the project, these meetings were more like learning interchanges with exchanges of experiences among project staff to disseminate new ideas. Monthly reprogramming of activities was done based on different staff experiences.

Institutionalization of the CARE supervisory system is not relevant to this project, since there is no plan to continue to project. The supervisory system developed within the project for self-supervision of APROMSAs and COPROMSAs and health promoters was institutionalized within the statutes of the promoter organizations.

D. Human Resources and Staff Management

Personnel policies and procedures - The *Enlace* project was not intended to be self-sustaining as a project after the end of four-year funding cycle. Rather, the project was designed and implemented to be absorbed into MOH operations by MOH personnel. Therefore, the sustainability of *Enlace* personnel policies and procedures is not relevant.

Morale, cohesion and working relationships - The external evaluator observed a high level of moral and cohesion among *Enlace* staff, which was clearly reflected in several indicators. First, the staff-turnover during four years of operation was minimal. There were eight core field staff: one coordinator (a physician) and seven technical and program assistants (three nurses, one midwife, one nutritionist, one social worker, and one administrator). Only one of them left *Enlace* and this was after three years with the project. (She was transferred to another CARE child health project to apply the skills and lessons learned from *Enlace* to that project.) The continuity achieved in project relationships with communities, health promoters, and MOH personnel was one of the factors that contributed to project success. Secondly, the *Enlace* staff has chosen to continue working together in a new CS project in an area of even more difficult access than Otuzco-Julcán.

Staff transition – All but one of the *Enlace* staff have transferred employment to a new *Enlace*-type project deeper into the mountains.

E. Financial Management

CARE is a firmly established institution internationally, with 30 years of experience of financial management in Peru with most of it's funding from USAID. Many years of successful financial audits have shown the fiscal integrity of the institution and its accounting procedures. In the case of *Enlace*, the accounting was managed under standard operating procedures with no major issues arising, according to the Financial Manager of the CARE Peru office in Lima.

The CARE Trujillo staff reported some information-related problems for the project office, due to its administrative distance from both the main country office in Lima and the international office in Atlanta. The CARE-Trujillo office did not feel that it was ever provided with complete information on project financial status, since CARE-Lima managed most of the budget, including salaries and most purchases. This created a challenge for CARE-Trujillo to adequately program its expenses on a month-to-month basis. Near the end of project, CARE-Trujillo was advised of a balance in its favor, which had to be hurriedly programmed in order to not lose it. They would have preferred to spend the money over a longer period to support activities.

F. Logistics

Logistics for the project administration and some project operations were coordinated between the CARE offices in Lima and Trujillo. Large purchases such as vehicles were made directly by Lima, with recommendations made by Trujillo. Other purchases were made by either Lima or Trujillo, based on where the best prices could be obtained for the products.

Medicine-related supplies required for implementation of community health activities were all under the responsibility of the MOH. For *Enlace*, the logistics system of the MOH was responsible for distribution to health facilities of ORS salt packets and, for promoters living in distant communities for whom it was relevant, supplies of cotrimoxazole. For the most part, the MOH system was efficient in maintaining supplies.

G. Information Management

Effectiveness of progress measurement – The baseline and end-of-project KPC surveys appeared to be well done in terms of sample selection, data collection, and analysis. It would have been helpful to have a control group in a different province with both baseline and final measurements to control for the effects of other MOH inputs in the primary care system that may have contributed to the dramatic increase in health service coverage in the Otuzco-Julcán area. *Enlace* did collect data to be compared to the final survey in a neighboring

province Huamachuco. While Huamachuco supposedly had the other same inputs from the various MOH institutional strengthening programs, it is more remote with higher levels of poverty and lower literacy resulting in limitations in direct comparability. (See results of the KPC survey in Attachment H.)

Near the end of year three, the project conducted a rapid assessment using the 30-cluster sample methodology to assess whether the project IEC strategy was bringing about changes in knowledge and behaviors among the target population. A complete report of these results was included in the Third Annual Report. Based on these results, *Enlace* re-emphasized the role of the community health agents (volunteer promoters and women leaders) as conveyors of information and facilitators of behavior change in individuals and families.

To support its quantitative measurements, *Enlace* did well to conduct focus groups on a yearly basis throughout the project to assess community reaction to project inputs and determine how to improve interventions. Focus groups and interviews were also conducted for the mid-term evaluation.

Improvements in MOH information systems due to *Enlace* **-** At least three different strategies were used to assist the MOH to improve its data collection and usage.

- 1. HIS The HIS is the standardized health information system used by the MOH to code and register all patient care contacts. This system has always had problems with reliability and validity due to little personnel training in how to fill out the form, exacerbated by high turn-over rates of personnel and little pre-service orientation for new staff. *Enlace* provided special training to health personnel in the Otuzco-Julcán Network to improve their skills in filling out HIS forms so that there is more consistency with data reported on each vertical program.
- 2. **Vertical program reporting forms** *Enlace* was instrumental in getting the UTES to include data items on their reporting forms for diarrheal diseases, ARI, and maternal health which quantify the work of community health promoters. These were:
 - On the diarrheal disease program reporting forms: # of cases referred by promoters
 - On the ARI program reporting forms: # of cases referred by promoters
 - On the maternal-perinatal health reporting forms: # of deliveries attended by traditional midwives and promoters and # of referrals from volunteers.
- 3. Community information system *Enlace* developed a community monitoring system and helped MOH facilities to install and learn to use EPI INFO software to track monthly reports submitted by health promoters. Information on case identification in the community by each promoter and the response to each case (i.e. whether an educational session or if a referral was given) was entered into a computer and analyzed. The system allowed the MOH to track whether or not the case management provided by promoters was appropriate. For example, for each case of child dehydration identified and reported by a promoter, the data analysis would show if the cases were continuing breastfeeding, if education was given to the mothers on breastfeeding, and if the dehydration cases had been referred (all cases

were supposed to be referred). If it was found that children with dehydration were not referred, or if some other aspect of appropriate care was not completed, then this information was used in monthly meetings with promoters to reinforce training on proper management of dehydration. Some health facilities needed additional training in use of EPI INFO, and will continue to need updating as new staff enter.

Project information has been utilized within CARE and USAID in Peru to support expansion of project strategies to other program. The MOH is utilizing project information now to disseminate project strategies to other MOH programs and other DISAs.

H. Technical and Administrative Support

Technical support was provided through the contracting of NGOs or individual consultants who were expert in specific technical areas identified as needed by *Enlace*. Most of the support was in the form of designing and implementing one or more training sessions or workshops attended by MOH health facility personnel, promoters, and *Enlace* project staff. Once the initial training was given, *Enlace* staff or MOH personnel took charge of implementing replica training to other persons. All of this training was put to good use by the project. Technical support was obtained in the following areas:

- Breastfeeding promotion and community breastfeeding support groups by CEPREN (Centro de Promoción y Estudios en Nutrición), a Lima-based NGO.
- Community empowerment by ATINCHIC, a Lima-based NGO.
- EPI INFO by a CARE Lima expert, Freddy Marreros.
- Use of information for management by a Project 2000 Monitoring and Evaluation consultant, Juan Seclén.
- HIS by PRISMA (Peruvian NGO) consultants, Doris Valdez and Juan Espejo.
- Baseline KPC planning and implementation by CARE consultant, Alonso Wind.
- Post evaluation KPC planning and implementation by CARE consultants, Carlos Chavez, Freddy Marreros, and Rachael McClennen.

The project needed, but could not obtain, technical assistance for developing a health promoter manual that would explain why the promoter should so things a certain way, not just what he needs to do. An attempt to hire a consultant did not work out since the person was unable to do the job requested.

Planning for technical assistance needs at the beginning of this project would have been difficult, since most technical assistance needs were identified during the process of project implementation. The needs could not have been anticipated to such a precise degree. What is learned here is that technical assistance should be an open process for ongoing needs identification. The best planning would be to have the expectation of using technical assistance and have funding available for use when needed.

CARE headquarters technical support was very good with the twice-yearly site visits. Follow-up was done in the field of specific project systems, such as the supervision, monitoring and evaluation systems. Managerial support was also provided by CARE headquarters at different points in the project when additional funding was needed to continue work if there was a cash-flow problem, or to add an additional component such as the breastfeeding community support group technical assistance.

I. Management Lessons Learned

Major management lessons learned were:

- 1. True teamwork was the most effective for project management. All project staff members had equal access to all project information and could made suggestions at any time.
- 2. Each project field staff member had specific responsibility for developing a technical component of the project, such as training, IEC, and community participation. This allowed field staff to make a creative professional contribution to the project, and not just be in a routine of field implementation. There was no distinguishing between thinkers and doers. Everyone did both.
- 3. The most important management lesson was to allow freedom for creativity, and not try to maintain a rigid adherence to the original project document when field experience showed that there was a more effective way to do things that had not been thought of initially.

IV. CONCLUSIONS AND RECOMMENDATIONS

In conclusion, the *Enlace* Project has contributed importantly to the development of community health programs worldwide. The two major contributions were the design and testing of effective organizational structures - APROMSAs and COPROMSAs - to support and sustain the work of volunteer community health promoters, and development of a community health surveillance and referral system – SIVICS – which structures linkages between the community and the health care delivery system. Both of these systems have caught the attention of the Peruvian MOH, and have a high probability of being replicated in other parts of Peru. The project provided important confirmation that the organizational and managerial aspects of a community health program are at least as, if not more, important as the technical approach taken

One of the key features of the *Enlace* Project was the high degree of co-implementation with the Ministry of Health (MOH). MOH personnel were trained by *Enlace* to implement promoter training and supervision, to collect and utilize community surveillance information, and to implement IEC activities. Continual project coordination with mid-level (UTES) and high–level (DISA) MOH administrative offices in the Region of La Libertad contributed to institutional strengthening and technology transfer to the public sector. MOH project collaborators had the highest praise for the professionalism, humane sincerity and dedication of the *Enlace* project coordinator, Dr. Luis Espejo. The same was true for the *Enlace*

professional field staff that worked directly with health facilities and promoters. The participatory working style of *Enlace* strengthened both institutional capability and acceptability of the project products on the part of the MOH.

The technical approach in the three intervention areas was effective because it was oriented to best-recommended practices, with strategies based on pre-project analysis of mothers' beliefs and practices. This approach did not include teaching promoters to provide low-technology solutions to health problems, except for early home treatment of diarrhea with increased fluids and continued feeding. Rather, the focus was on promoter identification of danger signs and symptoms, and referral or emergency evacuation to a health facility, or to organize a home visit by health personnel.

The project effectively used a variety of health communication methods that were identified by the community as their preferences for receiving information. These included especially contests for designing wall murals, songs, poetry, and theater-type presentations for transmitting health messages. Community gatherings for religious or other festivals were effectively used for organizing group games (*la tómbola*) with health-related questions and prizes for correct answers. Local radio transmitting stations were also used effectively for mass communication.

To improve the design of interventions, the project effectively used local technical resources at low cost to implement needed field studies. University students completing required internships conducted several studies for *Enlace*. In addition, local NGOs with specific skills were successfully employed to fill in needs for technical assistance.

The project identified the importance of using a gender approach to maternal health interventions in communities and developed a training program for "Women Leaders" (including TBAs and leaders of women's groups) for promotion of maternal health in the community, overcoming resistance to male providers and male health promoters.

The project highlighted the importance of not making promises that cannot be kept. *Enlace* was very organized and met all of its scheduled activities as programmed. This was important to build and maintain trust among project beneficiaries. This is frequent problem in public programs with competing levels of command. For example, the standard monthly meeting date between promoters and MOH health staff should be respected by the UTES and DISA, who should avoid scheduling other activities for their health staff on those dates.

It was found that project implementation should preferably make initial entry into all project areas at the beginning of the project, covering all health facilities and a number of communities in each. As the project progresses, increase the number of communities in the area of each facility. This is preferable to completing areas before moving into others, since the last health facilities to enter will be the weakest, such as what happened to Callancas in the *Enlace* project.

Use of cotrimoxazole by promoters living in remote communities for early treatment and referral of pneumonia cases was apparently successful in this project. The cases in question should be evaluated in more depth to be able to make conclusions and recommendations to the MOH Program for Acute Respiratory Infections.

The project highlighted the advantages of a flexible project design and open management style to be able to respond to community-generated solutions to their needs for structuring health services and designing information delivery systems.

The MOH should take note of how it could and should strengthen health facilities to enable them to support community work:

- Strengthen health facility management committees and CLAS associations so that
 they are able to serve as the MOH counterpart for promoters and promoter
 associations.
- Install a system for personnel performance evaluation in the health facility that considers four sets of performance indicators: intramural management, intramural health services delivery, extramural management, extramural health services delivery.
- Recognize community health work as part of the production of services that is required for personnel evaluation.
- Find a way for health facilities to dedicate a budget line item for forms and transportation to communities. Promoters may need minimum support to continue: copies of reporting forms, and some economic support to be able to attend monthly meetings.

Finally, the *Enlace* project is now serving as a model to the rest of the country for community health surveillance systems and community health promoter organization. It is recommended that a minimum staff be assigned by the MOH to: (1) serve as a continuing source of technical support to health facilities, APROMSAs, COPROMSAs, promoters, and communities to maintain the level of achievement attained, (2) serve as local guides to visitors for the dissemination process, and (3) provide technical assistance in other areas for monitoring the replication of the *Enlace* community health model in other zones.

ATTACHMENT A

Evaluation Team Members

EVALUATION TEAM MEMBERS

Evaluation Team Leader

Dr. Laura C. Altobelli is a senior public health professional specialized in maternal and child health and nutrition, with considerable experience in Latin America working in research, evaluation, and consulting for the World Bank, International Development Bank, USAID/Peru, the Population Council, UNICEF, ADRA-OFASA, CARE, the Academy for Educational Development, University Research Corporation, Environmental Health Project, Westinghouse Health Systems, JHPIEGO, and others.

Evaluation Team Member representing CARE USA

Dr. Judiann McNulty is Deputy Director of Child Health, Health Unit, CARE USA, Atlanta, Georgia. She has been responsible for providing technical assistance and overall supervision and monitoring to the *Enlace* Project since April, 1997.

KPC Leaders and Analysts

Carlos Chávez, MD, CARE consultant Freddy Marreros, Statistician, Hospital María Auxiliadora, Office of Statistics Rachael McClennen, MPH, CARE consultant

Data collection assistants

Eight nursing students from the University of Trujillo, who were completing an internship of rural service, assisted with the fieldwork in application of KPC survey questionnaires and in-depth interviews with project beneficiaries for the final evaluation.

ATTACHMENT B

Assessment Methodology

ASSESSMENT METHODOLOGY

Planning for the final evaluation was done prior to field observations, beginning with a review by the evaluation team leader of a series of project documents and videos produced by the *Enlace* project. This was followed by the preparation of six different guides for indepth interviews of project beneficiaries that were later revised upon review by *Enlace* staff and the evaluation team member from CARE USA. Interview guides were developed for the following groups to assess knowledge and attitudes about various aspects of project components:

- Health personnel in MOH facilities
- APROMSAs and COPROMSAs
- Health promoters and women leaders
- Community leaders
- Mothers in communities

Fieldwork for the final evaluation was completed during the week of August 14-18, 2000. During the assessment of the Otuzco-Julcán area, the evaluators split up into two teams to visit a total of five health centers and 10 health posts. At each health facility, evaluators conducted in-depth interviews with health personnel, APROMSA and COPROMSA members. Some of these were also interviewed regarding their work as individual promoters. A number of communities were visited at random to interview individual health promoters, communal leaders, and mothers. In addition, UTES personnel in Otuzco were interviewed in depth. During a second visit, to the Departmental capital of Trujillo, DISA personnel were interviewed, and a day-long focus group session was held with the *Enlace* project team. Names and titles of the persons interviewed and contacted for the evaluation are found in Attachment C.

The evaluation team also reviewed the work of the KPC team to verify data analysis methods and results.

The final project evaluation report was prepared by the team leader based on the KPC results, in-depth interviews, project documents, and field observations.

ATTACHMENT C

List of Persons Interviewed and Contacted

LIST OF PERSONS INTERVIEWED AND CONTACTED

HEALTH FACILITY/	TITLE OF PERSON	NAME
COMMUNITY	INTERVIEWED	
DISA LA LIBERTA	D	
	General Director	Dr. Henry Rebasa
	Director Personal Health & Director	Dr. Ana María Burga Vega
	of Epidemiology	
	Director of Health Programs	Dr. José Manuel Burgosa Zavaleta
	Director of Community Participation	Lic. Luisa Ancajima Hernández
UTES No. 8 - OTUZ	CO-JULCAN	
	General Director	Dr. Gilberto Gutierrez Cardenas
	Coordinator of CLAS, Training, and	Lic. Consuelo Chávez Fernández
	Community Participation	
MICRO-NETWORK	AGALLPAMPA	
C.S. Agallpampa	CLAS Manager	
	CLAS President	Otilio
	APROMSA Members (3)	
	COPROMSA Members (2)	
	Promoters (3)	
La Florida	Lieutenant Governor	Walter Rodriguez Mariños
	Mothers (3)	
P.S. Mache	Medical Director	Dr. Rocío Razún Araujo
	Midwife	Adriana Crisanto Nuñez
	COPROMSA Members (4)	
Mache	Governor	Glomer Rubio Valderrama
	Regidora del Consejo	Amanda Castro
Quinigon (Mache)	Lieutenant Governor	Juan Manuel Cipriano Cayetano
	Mothers (2)	
C.S. Salpo	Medical Director	Dr. Ronald Sumarán Aguilar
	COPROMSA Member (1)	
	Promoters (3)	
Salpo	Governor	José Castillo Velasquez
	Mother (1)	
Purrupampa (Salpo)	Municipal agent	Antonio Lozano
	Mother (1)	
Milluachaquo (Salpo)	Mother (1)	
MICRO-NETWORK	CALLANCAS	
C.S. Callancas	Nurse	
	Midwife	
	APROMSA Members (2)	
Callancas Bajo	Mothers (2)	
P.S. Charat	Health technician	Yolanda Bareta
	COPROMSA Members (2)	
Charat	Justice of the Peace	Paulino Guzman Alfaro

MICRO-NETWORK	X.IIII.CAN	
C.S. Julcán	Nurse	Miriam Beltrán
C.S. Julcan	Midwife	William Bettian
	Health technicians (2)	
	APROMSA Members (4)	
	COPROMSA Member (1)	
	Promoters (4)	
P.S. Sichal	Promoter (1)	
r.s. sicilai	Auxillary nurse	
Onomolavi (Sinahal)	Mothers (2)	
Oromalqui (Sinchal) P.S. Extensión Julcán	Head Nurse	Ana María Maria
P.S. Extension Julcan		Ana Macín Moya
	Health Technician	Silvina Valiente Miranda
CI.	COPROMSA Member (1)	
Chugurpampa	Promoter (3)	I (N + O()) B 1 1
	President Multisectoral	José Nestor Otiniano Delgado
	Committee/School Director	
Y 11 15 11	Mothers (2)	
Victor Julio Rosell	Municipal Agent	Cristian Burgos R.
	Mother (1)	
	K RAMON CASTILLO	
C.S. Ramón Castillo	Head Nurse	Carmen
	APROMSA Members (2)	
P.S. Samne	Medical Director	Marisol Loyola Verde
	COPROMSA Members (4)	
	Promoters (5)	
	Mayor	Jorge Chacón
	Mothers (2)	
P.S. Monchacap	Nurse	Silvia Caffo Gonzales
P.S. Pango	COPROMSA Members (2)	
	Promoters (3)	
	Mother (1)	
La Libertad (Pango)	Lieutenant Governor	Abundio Amancio Mendoza
	Mother (1)	
Tambillo (Pango)	Lieutenant Governor	Ascensión Mankrez Castillo
	Mother (1)	
MICRO-NETWORK	USOUIL	
C.S. Usquil	CLAS Manager	Nurse Maruja Aniseta Urteaga
	Midwife – Com. Partic. Coordinator	Janette Landa Ramirez
	Lab Technician – IEC Coordinator	Ismenia Cerna Hernández
	APROMSA Members (4)	
	COPROMSA Members (2)	
	Promoters (3)	
Usquil	Lieutenant Governor	Walter Gil Obeso
Obquii	President Potable Water Council	Manuel Rodriguez Rodriguez
	President Mothers Club	Rosa Grinaldina Cordova Chávez
	Mothers (3)	Rosa Officialuma Coluova Chavez
P.S. Coina	COPROMSA Member (1)	
		Evidalvia Davia Minchele
P.S. Cuyuchungo	Head Nurse	Evidelvia Reyes Minchola
	COPROMSA Members (4)	
	Promoters (3)	

P.S. Barro Negro	Midwife				
	Health technicians (2)				
	COPROMSA Members (3)				
	Promoters (4)				
	Mothers (3)				
CARE PERU STAFI	F				
Trujillo	Enlace General Coordinator	Dr. Luis Espejo			
	Chief Technical Assistant	Alexandro Vargas Vasquez			
	Extramural Specialist – Community	Silvia Valderrama Sánchez			
	Participation Coordinator				
	Technical Assistant – IEC Coord.	Jenny Milla Risco			
	Program Assistant – Training Coord.	Rosario Vargas Lucar			
	Program Assistant	Luz Elena Mendoza Navarro			
	Administrative Assistant	Sandra Sánchez Araujo			
Lima	Financial Manager	Sra. Gladys Soto de García			
CARE HEADQUARTERS STAFF - USA					
Atlanta, Georgia	Deputy Director, Children's Health	Dr. Judiann McNulty			

Total number of persons interviewed:

Enlace and CARE Staff	9
MOH – DISA and UTES	6
MOH Health Facility Personnel	23
APROMSA Members	15
COPROMSA Members	27
Health Promoters	37 (many of these were also interviewed as APROMSA or COPROMSA members)
Community leaders	15
Mothers	26

ATTACHMENT D

Copy of Formal Agreement Between Agallpampa CLAS-APROMSA-Municipality of Agallpampa

Attachment D

Copy of formal agreement between Usquil CLAS, the APROMSA and the Municipal Government of Usquil.

Copy of formal agreement between Agallpampa CLAS, the APROMSA, and the Municipality of Agallpampa

ATTACHMENT E

Promoters Trained by Topic and Micro-Network

PROMOTERS TRAINED BY TOPIC AND MICRO-NETWORK

TOPIC	Usquil	Otuzco	Agallpampa	Julcán	Callancas	TOTAL
ARI/Pneumonia	138	172	195	190	38	733
Diarrhea	135	168	195	190	20	708
Maternal Health	118	172	27	18	33	368
Breastfeeding	96	160	137	190	14	597
Educational Methodology for Adults	138	168	167	190	29	692
Leadership/Management I	6	8	6	7	0	27
Leadership/Management II	5	4	7	4	4	24
Management	13	18	23	35	13	102
Supervision	0	0	25	30	0	55
Community Empowerment	0	0	23	30	0	53
WOMEN LEADERS TRAINED						
1998	0	0	0	55	0	55
1999	0	33	45	160	0	238
2000	40	14	148	0	0	202
TOTAL	40	47	193	215	0	495

MINISTRY OF HEALTH PERSONNEL TRAINED BY TOPIC

TOPIC	Physician	Nurse	Midwife	Nurse Technician	Other Person	TOTAL
Educational Methodology for Adults I	6	13	4	17	1	41
Educational Methodology for Adults II	7	14	5	7	1	34
SIVICS	31	36	21	41	14	143
EPI INFO	8	6	2	3	5	24
HIS/MIS	20	30	14	30	9	103
Use of information for management	7	10	5	2	1	25
Breastfeeding	1	9	6	1	0	17
Community Empowerment	2	5	2	0	0	9
Leadership/Management I	5	4	0	0	0	9
Leadership/Management II	4	4	0	0	0	8

ATTACHMENT F

Description of APROMSA Development

Health Promoter Associations: A Strategy for Sustainability CARE/Project *Enlace*By Rachael McClennen¹

Introduction

The sustainability of any child survival project is an issue of great concern for project staff and funding agencies from the outset. Typically, such projects enter a certain geographical area and train volunteer community health promoters² in interventions such as diarrheal diseases, respiratory infections, maternal health, breast feeding, immunizations, and nutrition, among others. The project coordinates with the Ministry of Health (MOH) in order to increase the sustainability of the work of the health promoters when the project has left the area. The expectation at the completion of the project is that the MOH and the health promoters have attained a solid working relationship and the necessary skills to ensure that the work will continue.

Two issues affect the ability of Ministries of Health in sustaining the efforts of community health volunteers. The first is that of resources. Rarely does the MOH have funds to provide refresher training for the volunteers or to recruit and train new volunteers. Nor do Ministry staff have time and transportation to travel to communities to maintain supervision and communication with the promoters. Secondly, there is the issue of MOH perception of the value of the work of the community volunteers in relation to the amount of effort required to support them. Without MOH support, training and supervision, volunteers soon lose their motivation and cease participating. Desertion rates in excess of 50% are common when PVOs withdraw.

When the link between the MOH and the health promoters is not strong enough, and leadership and self-sufficiency of the volunteers not fully developed, the end result is less health impact than expected, unsustained behavior changes, disillusioned health promoters, unsatisfied MOH personnel, and wasted money.

CARE's *Proyecto Enlace*³ (Project Link) in the highlands of La Libertad region of northern Peru has utilized the strategy of forming and strengthening Health Promoter Associations (APROMSAs) that will greatly increase the level of sustainability of volunteers. As the project nears its end, it is clear that the APROMSAs and the MOH have gained the necessary skills and credibility in their communities to elaborate annual operating plans, including supervision and activities that allow for generating funds. This allows for complete self-sufficiency of the health promoter associations, which in turn leads to better-developed communities, active health promoters, and satisfied MOH personnel.

¹ This was originally written as part of an internship experience for a Masters in Public Health, Harvard School of Public Health in the summer of 1999. This current version was edited by Judiann McNulty, DrPH, Deputy Director for Children's Health at CARE, USA in September, 2000.

² The terms *volunteer* and *promoter* are used interchangeably in this document.

³ Project *Enlace* was funded by CARE and USAID under a grant from BHR/PVC for Child Survival XII.

This report gives the history of APROMSAs in Peru, explains how Project *Enlace* has utilized and strengthened their presence, and what lessons the CARE has learned that it can apply to future child survival projects.⁴ By taking advantage of this strategy, other child survival projects will be even more sustainable because they will leave self-sufficient institutions working together with the MOH to improve health in rural communities.

History of Health Promoter Associations in Peru

The oldest APROMSA in Peru was formed in 1980 in San Marcos, Cajamarca. In 1979, the Catholic Church trained a number of health promoters from nearly 50 communities in various health interventions. Because the promoters soon felt that their activities were not well coordinated with each other, they decided to join together to form an association, in hopes of being more easily recognized by their communities, the MOH, non-governmental organizations (NGOs), and the state. At that time, they formed a board of directors that had the responsibility of overseeing its approximate 80 members.

The Church was only one of the institutions to help form and strengthen the APROMSA San Marcos, as time went along. The APROMSA also had a large amount of support from MOH personnel, in particular Dr. Alfonso Nino Guerrero, who was on staff from 1980 to 1984. Although the APROMSA members received no formal leadership training, they were empowered by Dr. Nino, which has aided them to continue to be an organized institution despite his later absence. In addition, the APROMSA received support from various organizations such as UNICEF, CARE, CEDAS/IDEAS, and APRISABAC. The various NGOs, the MOH, local governments, and the Catholic Church each helped to support the training of the APROMSA members and its board of directors in various health interventions and limited accounting principles. They have also donated materials and logistical support for training such as transportation and meals, and educational materials for promoters to use in their communities.

It was not until 1995 that APROMSA San Marcos decided to obtain legal status, including a constitution and bylaws. The board of directors chose to apply for legal status in order to more easily solicit funding, material, and logistical support. Having official legal status has improved the reputation in the communities, allowed organized coordination with the MOH, and in turn created a more efficient APROMSA.

Current APROMSA San Marcos

Currently, the APROMSA San Marcos is a well-established and respected institution. It has a house that serves as a meeting place for the board of directors, and as a place to receive patients with a small pharmacy. The house is currently being renovated for the purpose of adding a community soup kitchen and small hotel. The board of directors hopes to generate enough funds to be able to support the cost of a telephone and vehicle.

⁴ As of September, 2000, the APROMSA strategy of CARE is being adopted by the Ministry of Health of Peru as an essential component of their community program for other regions of Peru.

The board of directors is comprised of a president, vice-president, treasurer, secretary, finance officer, and various minor officers. The health promoters elect a new board of directors every two years. The board meets about every two months in order to review the work of the health promoters, and to follow up on fundraising and financial issues. In addition to the board of director meetings, all members of the APROMSA meet twice a year for workshops, refresher courses, and to address financial issues. Underneath the board of directors, three coordinators are responsible for overseeing the work of the promoters in their geographical region.

The APROMSA San Marcos organizes various activities in order to improve health in its communities and to generate funds to support the APROMSA. In addition to having promoters in each community who are in charge of disseminating health messages to community members, the APROMSA produces a daily radio hour, and holds health fairs to educate the community. Also, the APROMSA has received a loan in the amount of approximately \$2000 from a local NGO. The APROMSA has used those funds to begin a rotating fund that its members can use for personal investments, such as seeds, tools, land, etc. The interest that the APROMSA makes from those loans is used to help finance things such as food and transportation during the refresher courses that the MOH gives. The APROMSA also continues to apply for funds and receive support from the MOH, NGOs, and local governments. In addition to health activities, the APROMSA takes part in regular multi-sector meetings in the communities, as well as round table discussions to address specific development issues.

In spite of APROMSA San Marcos' overall operational efficiency, the organization contends with various obstacles. Members of the board of directors admit that they lack certain skills to be able to continue to grow and provide development in their communities. For example, although they have received some training in accounting principles, they desire more to better track their rotating fund. In addition, they admit that they lack skills in managing paperwork, administering projects, and fundraising. Structurally, the APROMSA San Marcos has its weaknesses as well. For example, its structure is such that there is one board of directors and three coordinators who try to oversee the work of all of the health promoters. This has limited their capacity to provide supervision and support to all members.

APROMSAs of Project *Enlace*

When Project *Enlace* began its work in La Libertad region in October of 1996, two of the current five APROMSAs were already loosely formed by a previous CARE water and sanitation project in the early 1990s. They were modeled after the San Marcos experience. APROMSA Usquil did not have a legal constitution, bylaws, accounting books, or legal recognition by the government Although the APROMSA Otuzco had legal status, it was not sufficiently organized and active. These two APROMSAs were organized in such a way that the members had been working together as a group of promoters for the duration of the water and sanitation project, yet following the project their coordination was somewhat weak. Because the APROMSAs did not have recognition throughout the community, the MOH and the local governments were reluctant to recognize their possible advantages of improving the health of the population. Project *Enlace* focused on the strengthening of those two APROMSAs, in addition to the formation and strengthening of three new APROMSAs in the project area, as one of its strategies of

sustainability. Each APROMSA covers a geographical area known as a "micro-network". Because the MOH's jurisdiction of the project area is divided into five micro-networks, three additional APROMSAs have been formed, and the two existing ones strengthened. At the level of each micro-network, there is one main health center and various smaller health posts.

Essential Steps for Successful APROMSAs

Project *Enlace* has used a variety of strategies to form and strengthen the five APROMSAs. In addition to educating the promoter members in the specific health interventions of the child survival project, *Enlace* trained the APROMSA boards of directors in skills pertaining to management.

1. Selection of the Volunteers

At the beginning of the project, *Enlace* held meetings in each of the project communities to help facilitate the communities' process for identifying potential community leaders. Once the health promoters were selected, or existing promoters reaffirmed, *Enlace* trained the MOH staff to train the promoters and began to form and strengthen the APROMSAs. This process allowed the MOH to build a direct relationship with the promoters.

2. Training of the APROMSA Health Promoters

All of the health promoters began receiving training from MOH personnel in the interventions of the Project *Enlace*: diarrheal case management, respiratory infection case management, maternal health, breast-feeding, and methodology in adult education. Trainings were organized in a decentralized manner. Each health unit (post or center) trained its corresponding APROMSA members, allowing for better communication and mutual understanding between the APROMSA members and MOH personnel.

3. Formation of the APROMSA

Even as the promoters began receiving their technical training, the organization of the APROMSA began. The first step, an innovation of *Enlace*, was to organize local groups around each health unit. These groups are called COPROMSAs for Committees of Health Promoters. The purpose of the COPROMSA is to allow for close coordination and supervision of the promoters among themselves and to serve as a channel of communication with local MOH personnel. In each COPROMSA, a board of directors was elected, including a president, secretary, treasurer, and *vocal*. Once the boards of directors of all of the COPROMSAs were formed, board members met at the micro-network level to discuss and propose statutes which would be used in the APROMSA's constitution. (Normally, each APROMSA is made up of about five COPROMSAs, depending on the number of health facilities in the micro-network) The proposed statutes developed by the boards of directors of the COPROMSAs were then shared with all of the health promoters of that APROMSA, and the board of directors developed

the constitution based on the agreed upon statutes. The health promoters met and agreed upon and signed the constitution, thus formalizing the APROMSA.

Once the constitution was signed, an electoral committee was formed to aid in the election of the board of directors of the APROMSA. The electoral committee decided upon the voting process, and then carried out the election, by process of secret vote, of the APROMSA's president, vice-president, finance officer, secretary, and treasurer. In addition, the president of each COPROMSA represents his/her COPROMSA within the APROMSA.

Upon the election of the board of directors of the newly formed APROMSAs, they began a fundraising process in order to pay for the registration of the institution with the government. Upon acquiring the necessary funds, the board of directors of the APROMSA was then able to take the constitution to a public registry in order to gain legal status.

APROMSA and COPROMSA Primary Roles

The principal objective of forming and strengthening the board of directors of the COPROMSAs is to provide support and supervision to the health promoters in each cluster of communities. Members of the COPROMSA board, on a regular schedule, visit the other health promoters in their communities to observe their work with community members, give advice regarding how to improve their work, and address any questions that the promoter may have. In addition, the COPROMSA makes an annual operating plan with the local health staff and coordinates participation of the health promoters in health promotion events carried out as a group.

The primary role of the APROMSA board is to raise funds for activities and keep the APROMSA and COPROMSAs active. This includes establishing and maintaining strong relations with municipal authorities and micro-network health officials. In addition, the APROMSA board of directors also serves a supervisory and supportive role over the COPROMSA board. In order to oversee the APROMSAs, the various presidents of the APROMSAs have formed themselves into an informal supervisory committee to supervise each APROMSA. This system allows for mutual support, continual sharing of experiences and efficient problem-solving.

4. Training of the APROMSA Leaders

Once the board of directors of the APROMSA was selected, *Enlace* began trainings to strengthen the APROMSA leaders and the MOH personnel. (The MOH personnel designated to work with the health promoters needed to learn the organizational and management skills necessary to support the APROMSAs and to train future leaders.) In order to address the areas that needed the most strengthening, *Enlace* staff held a workshop with the board of directors of the APROMSAs (including the president from each COPROMSA who has the job of representative to the APROMSA) and key MOH personnel. In the workshop, they identified needs for training that would allow them to have a self-sustaining APROMSA and an empowered MOH. They also discussed possible visions for their institutions, including the role that each functionary would

play. All members of the boards of directors of each APROMSA and each manager at the micronetwork health center level began receiving workshops. The themes that the participants identified, and in which they were subsequently trained, included the following: accounting principles, supportive supervision, communication skills, how to work in teams, leadership, fundraising skills, gender issues, facilitation, training of trainers, self-esteem building, management, project design, and how to formulate, evaluate, and monitor an annual operating plan.

These skills were taught in workshops given by *Enlace*, other CARE staff, and outside consultants. For example, in the case of accounting principles, one of the CARE accountants facilitated the workshop. In the case of the leadership workshops, an outside consultant was hired to facilitate. The complete boards of directors of the APROMSAs took part in the workshops along with the manager of each head health center. The workshops usually lasted two or three days, and they were more centralized than the workshops that the MOH facilitated, in that they were based in a central location as opposed to the communities. In addition to this format being logistically effective, it also allowed for APROMSA leaders to share their experiences with others. They were able to learn about each others' difficulties, challenges and successes. As a step towards sustainability, from the beginning, costs of the training were shared by CARE, the MOH, and APROMSAs.

In addition, *Enlace* implemented meetings of all APROMSAs on a bi-monthly basis to allow the leaders of the COPROMSAs and APROMSAs to exchange their successes, challenges, and lessons learned. This proved to be extremely valuable because it allowed the leaders to motivate and support each other.

In addition to formal workshops addressing the previously listed themes, *Enlace* staff members made frequent visits to the health centers to be able to reinforce the skills taught in the workshops, both at the level of the MOH and with the boards of directors of the APROMSAs and the president of each COPROMSA. *Enlace* staff monitored the elaboration of the APROMSA's annual operating plan, utilized opportunities to give and receive feedback, reinforced leadership skills, encouraged teamwork, gave advice for fundraising and managing of funds, etc.

Currently, the COPROMSAs and APROMSAs have well-defined visions and work plans that correspond with MOH goals. These work plans are made in conjunction with the MOH and municipal government. The APROMSAs coordinate with the MOH and local governments in planning health fairs, radio programs, refresher courses, and plays for community members.

All members of the COPROMSAs typically meet once a month with MOH personnel to present and discuss reports, solve problems, evaluate progress toward the work plan, and plan future activities. Usually, the board of directors of the APROMSAs meets once a month with MOH staff, and with all the promoters every three months. New boards of directors are elected every two years.

Benefits of APROMSAs

The advantages of having organized and active APROMSAs superceded the expectations of *Enlace* staff. One of the most positive outcomes of the presence of APROMSAs has been greater respect of promoters on the part of the local government, the MOH, and NGOs. By observing MOH staff and promoters interact, one can note the mutual respect that each hold in the work environment. APROMSA members note that the MOH appreciates promoters' work because it leads to increased coverage, increased use of health services and improved health behaviors. The MOH is particularly pleased to have the accurate census data that promoters continually up-date. MOH personnel are also more aware of the fact that health promoters are volunteers, and have come to value their work to a larger degree.

In turn, the personal relationship between promoters and health personnel has resulted in the health personnel leaving the clinics more often to provide services and education in the communities and visit patients in their homes. When health staff travel to a village, they know they will be met by the volunteer, presented to the households they need to visit, and accompanied in their activities. They also know they can send word to the promoter to follow-up on specific patients. The MOH staff state that it is much easier to plan and work with the promoters as an organized group rather than as disperse individuals when it comes to arranging for training, meetings, or other organized events.

APROMSAs have asked for and received financial or logistical support from their local governments in their work activities. Two have already been successful in acquiring donated land to build a place for training and meetings. Another has successfully negotiated with the municipal government to provide food for future training workshops. Because they recognize that health is not the only issue in development work, they participate in multi-sector committees in their communities. The APROMSAs also have plans for soliciting support from NGOs and government institutions and well as regular fund-raising activities such as raffles, barbecues, etc. All APROMSAs were given motorcycles by CARE's water and sanitation project, which they use to provide supervision and attend provincial meetings. However, they now must use some funds that they generate in order to pay for maintenance and gas of the motorcycles.

APROMSA leaders comment that they have gained greater respect within their communities. Although in the beginning stages of their work, community members only searched them out for free medicines, the people now have come to understand that the role of the promoter is more of a preventative one. They have come to see the difference that the health promoters are making in their community. In addition, the leaders of the APROMSAs and COPROMSAs note the personal satisfaction of being leaders in their communities. They have the advantage of learning how to manage an organization and how to participate in fundraising

The promoters have also made personal gains as a result of their involvement. Some have become active in helping plan civic events, others have become members of the Local Committee of Health Administration (CLAS), health advisors to mayors, literacy teachers, nursing students, and secondary school students. Such impressive personal and professional growth among APROMSA leaders was an unexpected result in the strategy of forming and strengthening APROMSAs.

A major advantage of the formation of the APROMSAs is that there is a better flow of communication among the promoters, continuous supervision, and therefore more effective outcomes. Leaders of the APROMSAs believe that having their own system of supporting and supervising health promoters leads to more active promoters and less drop outs. Because the promoters are continuously given feedback and support, they are more motivated to continue working and improving their skills. The desertion rate among promoters after 4 years is 12%, almost entirely attributable to migration from the area.

Board members of the APROMSAs also comment on the importance of meeting with and having exchanges with other APROMSA leaders. They are able to give each other suggestions, share successes, and problem solve together.

Challenges that APROMSAs Face

APROMSA leaders identify very few disadvantages that they face in light of being part of an organized institution. Even though membership in the COPROMSA and APROMSA requires even more donated time, members do not see that as a problem. In fact, *Enlace* and the MOH have observed that the promoters who devote the most time to their community activities are the same ones who are most willing to accept an elected position or committee assignment in their APROMSA.

On an institutional level, the principle challenges are maintaining commitment of the individuals to the organizations, and the constant quest for funds to support operation and activities. The leaders feel these challenges can be dealt with by continually reconfirming the purpose of the organization in order to motivate the membership.

Current Sustainability Situation

The APROMSA leaders state that when *Enlace* leaves the project area, they will continue to function as they have been functioning currently. They already have the skills and the experience to be able to successfully solicit funds and logistical support from local governments, the MOH, and other NGOs.

Very important to sustainability is the mutual commitment with the MOH. The APROMSAs have very strong relationships with the current MOH personnel at the level of each health unit. Two of the micro-reds have signed agreements with the APROMSA and the municipal government to support the APROMSA and the work of the promoters. In addition, the district health administration (UTES-8) has written a resolution pledging on-going support of the APROMSAs and their work.

Lessons Learned

Interestingly enough, those who state that the transition to post-*Enlace* work will be challenging are the COPROMSA leaders, not including the presidents. They are the leaders who have not received the same workshops that the APROMSA leaders received, such as leadership, fundraising, accounting principles, etc. This is an important issue to consider in future replication. It will be most effective to train all APROMSA and COPROMSA members for the most sustainable results.

Because the exchanges of experiences have proven to be so useful to APROMSA and CORPOMSA leaders, it may be helpful to hold more formal events in the future. Such opportunities for sharing experiences allow for peer support and encouragement.

Another important lesson that *Enlace* staff have learned is the importance of involving female leaders, such as mid-wives and members of the mother's club, in APROMSA activities. Because the percentage of female promoters is between 35% to 40%, it is important to involve other female leaders from the communities. In future projects, other strategies to involve women in the project could be found, for example, increasing the quantity of female health promoters or by fully incorporating other female leaders in the communities.

Like any well-organized institution, APROMSAs should also have a written vision that is defined by the promoters. By having a future to work towards, the APROMSA membership is more likely to be active in activities and fundraising.

Conclusion

Project *Enlace*'s strategy of forming and empowering health promoter associations has proven to be a sustainable way to ensure active, efficient, and effective promoters when the project is no longer in the area. It allows for a self-sufficient institution, that now has the skills to manage its own members, solicit funding from outside institutions, and to continually make a difference with respect to the health of their community members. The APROMSA model must not be limited to isolated projects. It has potential to be scaled up into national health programs throughout the world.⁵

At one meeting of a COPROMSA, one volunteer informed the others that he was planning to resign as his community's designated health promoter. A newly elected local authority was publicly trying to decrease community respect for his actions as health promoter. The other COPROMSA members gave him moral support, stressing all the good he had achieved in several years of community service. They convinced him his actions were of great value to his community and gave him advice on how to defuse the situation. In the end he was convinced to continue.

⁵ CARE is currently replicating the strategy in Nepal and Tanzania to show adaptability for Asia and Africa.

ATTACHMENT G

Birth Planning Form

ATTACHMENT H

KPC Final Survey Report